

THE ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration



Two Shillings and Sixpence Net

Vol. XCIII

February 1943

No. 554

The perfect finish

Suspended for the duration are the happy days on the club deck, as the six metres came over the line, close-hauled in a fresh breeze. The sound of the gun has another significance now.

There is another perfect finish—Cerrux, that is appreciated wherever it is used. Today, naturally, it is somewhat restricted for non-essential purposes but we shall be happy to supply you, if we are permitted to do so. CELLON, Ltd., Kingston-on-Thames. Telephone: Kingston 1234.

CERRUX
DECORATIVE FINISHES



CVS-504C

The Architectural Review

CONTENTS FOR FEBRUARY, 1943

HISTORY COINED IN COPPER	30
A PLEA FOR STANDARDIZED EQUIPMENT By Noel Carrington.. .. .	31
MUNICIPAL OFFICES.. Sir John Brown and A. E. Henson, architects	33
FLATS. Messrs. Joseph, architects	37
EIGHTEENTH CENTURY PENCE AND HA'PENCE By F. D. Klingender	41
BETWEEN THE EYE AND THE HOUSE By Kenneth Rowntree	46
A HARRIS FLORILEGIUM By Peter F. R. Donner	51
STROUD VALLEY DORIC	52
BOOKS :	
RURAL BRITAIN AND THE FUTURE. By W. K. Slater. Review of "Industry and Rural Life. Being a Report of the Cambridge Conference, 1942," by H. Bryant Newbold	55
PETERSBURG AND HER EMPRESSES. By Peter Quennell. Review of "Palmyra of the North. The first days of St. Petersburg," by Christopher Marsden	55
THE SCOTT REPORT FOR CHILDREN. By Stanislas T. Scott. Review of "Village and Town," by S. R. Badmin	56
SHORTER NOTICE	56

SUBSCRIPTION RATES : United Kingdom, £1 5s. 0d. per annum, post free.
U.S.A., \$8 per annum, post free. Elsewhere abroad, £1 5s. 0d. per annum, post
free. An index is issued every six months covering the period January to June,
and July to December, and can be obtained without charge on application to
the publishers :

THE ARCHITECTURAL PRESS,
War Address:
45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087

Vol. XCIII

No. 554



HISTORY COINED IN COPPER

During the later part of the eighteenth century, England entered into a monetary crisis whose effects on everyday life must have been highly unpleasant to all and sundry. The prices of silver and copper had gone up so steeply that the Royal Mint all but ceased to issue small coins. At the same time the industrial revolution had driven thousands of farmers and farm labourers into the towns and the factories, and they had to be paid daily or weekly wages in cash. To remedy the acute shortage of copper coins, a few of the leading manufacturers began to issue private tokens which, though never officially recognized by the Government, enjoyed a wide circulation. Many inscriptions are found on tokens such as "Payable in Hull and London," "Payable in Anglesey, London and Liverpool," etc. The first tokens date from 1787. Five years later, however, their scope seems to have changed completely. Collectors discovered what a collectionable article tokens so varied and often so pretty in design would be, and by 1795 hundreds had been issued to satisfy the collecting urge of a class of only moderate means. Industrialists and shop owners, booksellers, naturalists and art dealers issued them. And as the late eighteenth century was also the age in which advertising was first widely and ably utilized, collectors' tokens as well as the rarer "semi-legal tender" tokens were made the medium of effective publicity. "Cheapest hat warehouse in the world" say Messrs. Salter's of Charing Cross on one of the three tokens illustrated on this page. Boulton and Watt, on another, proudly show their new Birmingham brass works, and R. Burdon, the designer of the famous Sunderland Bridge, shows his work on the third, and records on the reverse his name and the date when the building had been begun: September 24, 1793. The original tokens are all much smaller than the illustrations on this page. They were pennies, halfpennies and farthings. An article on pages 40-46 deals with the late eighteenth century tokens in all their aspects—æsthetic, social and political. This month's Anthology describes the impression which the Sunderland Bridge made on a foreign traveller in 1809.

A plea for standardized equipment

By Noel Carrington

CERTAIN parts of the reconstruction equation must necessarily remain at the *x* and *y* stage until the end of the war: other parts could be mastered now with advantage unless the plea of surprise and unreadiness is to be valid in peace as in war. I refer particularly to the principal items of equipment that will be required for any post-war domestic building programme and without which houses cannot be considered as habitable homes. We can calculate now the minimum number of baths, basins, taps, stoves, sinks, lighting fixtures, etc., which we shall need. The question is, of what design shall they be? Are we to be content with just anything that manufacturers can make in time? Or are we to aim at the best in each appliance that human ingenuity has yet brought forth? We shall need to bear in mind two relevant factors. The first is a temporary but dominant shortage of material and machines. The second is that any bottleneck in production from whatever cause would be as serious as a bottleneck now in airplane instruments or guns. The problems which will face us in reconstruction will have much in common with those which have beset us in the last few years. In war, waste and profiteering are excused on the grounds of overriding urgency, yet even so it is not found that an overflow of public money produces either the right design or the required quantity. For instance, one may quote from a Memorandum which the Institute of Production Engineers submitted to Mr. Oliver Lyttelton stressing the value of design in articles of continuous manufacture. The price of a Bren Gun part was reduced from £238 15s. per hundred to £11 10s. per hundred after re-design. The increase in output must have been in proportion.

On occasions of previous large building programmes the Government has assumed that expenditure on housing would stimulate ancillary manufacture. And this, of course, was so. Through municipal departments, contractors and builders, the demand for equip-

ment was soon felt. Why then should we not feel confident that the same processes should be left to operate after the war? The answer depends largely on whether our aim is purely quantitative or in any degree qualitative. Or to put it bluntly, are our new houses to be as good as science and industry can make them, or to be second rate and obsolete on the day they are occupied? If such a question sounds rhetorical, then sceptics should examine many of the council flats or houses, let alone speculative estates, which were completed in the decade before this war—some, I am afraid, with the blessings of architects who should have known better.

Some years ago THE ARCHITECTURAL REVIEW carried out a survey of house equipment. Its aim was to show good design regardless of methods of production or price. In an exhibition, which Miss Denby and I prepared recently on behalf of the D.I.A. for the Army Bureau of Current Affairs, price was again disregarded. The comparatively high cost attaching to many excellent articles is not necessarily due to complexity in the making, nor to better material. It is simply that the design embodies some new idea and has at this stage only gained a small market. In theory the better design should soon drive out the inferior or the obsolete, but in practice one finds that there is a vested interest behind an established pattern which makes it difficult to dislodge. Perhaps this is particularly so in building, because most items of equipment are not offered for sale to the public in a store but come to the house purchaser or tenant as part of a ready-made house. And whatever we once accept, we soon grow accustomed to and believe to be universal. At a given moment the equipment going into the working-class dwellings is five, ten, or maybe twenty years out of date. The time-lag varies for reasons intelligible or utterly obscure. Some such time-lag is inevitable in ordinary times when the natural conservatism of human beings is taken into account, but the particular case we

are considering is not an ordinary one. It will be an emergency, and it will be the chance of a lifetime.

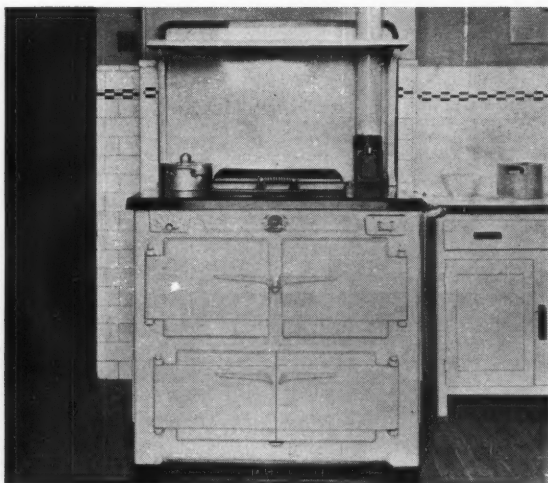
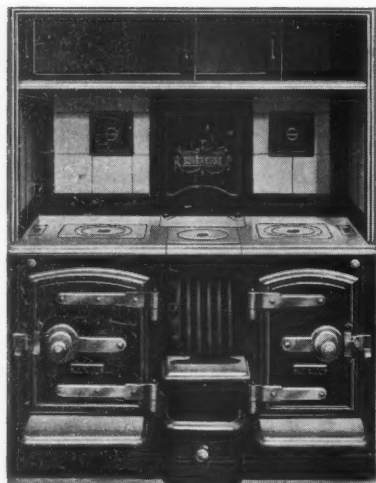
We have, then, first the great disparity between one article and another, purporting to give the same service. The modern heat-storage cooker and the familiar cast-iron kitchener are two extreme examples. Yet I am credibly informed that on a mass-production basis the heat-storage cooker of the latest type could be produced at a cost which would make it quite accessible to working-class houses. Only those who have changed from one to the other (as I have myself) can measure the saving in time, labour, temper and fuel.

Secondly, we have a multiplicity of designs where one or a very few would suffice. How many gas or electric cookers are there at present, and how many are really needed? How much is spent on electric fittings in subsidised houses? How much need be spent, and—more important—where and in what strength should light be directed—a question to be answered before fittings can be designed. The more one studies this field, the stronger the impression of an endless variety of articles of furniture, equipment or of labour-saving gadgets which differ from each other, sometimes not at all in essentials but only in trade name, and which too often are all equally obsolete. At the same time, many developments—refrigeration for example—are still out of the reach of the masses, because no standard unit has been mass-produced in the same way as Bren Guns are produced in war. Without a doubt the working-class dwelling should and could have attained a very much higher standard before this war if industry had been set the target as it is set a similar target to-day for other purposes.

The question therefore narrows down to this. Will the rehousing programme be allowed to create a demand for household appliances, with prices perhaps controlled, but standards and designs uncontrolled, or shall we, on the basis of recent experience, settle now which designs



The development of the fighter plane from the last to this war shows how a scientific approach to design, pride in the appearance and performance of a product, and manufacturing on the largest scale can enhance æsthetic qualities while spectacularly reducing costs. The Spitfire has no stuck-on bits, no struts and wires; wings, body and tail appear as one organism. If the same methods of research and production were applied to peace-time needs—



—such domestic blessings as the Esse Cooker could be brought into thousands of houses in which women now struggle with old-fashioned kitchen-ranges.

are best for each important class of dwelling, and standardise those designs now. That standardising will effect enormous economies in material, machines and labour needs hardly to be argued (and the material shortage may for a time be important). Even the contention that it will "upset production" cannot apply when nearly all industries must be re-adapted to peace. What matters most is that families should get a higher standard of living in terms of cleanliness, efficiency, leisure and beauty of surroundings. In effect one is asking that we should take advantage of the war to abolish the natural time-lag I have mentioned, at least temporarily, for the benefit of the next generation, just as in the realm of literature Allen Lane has abolished the time-lag in the Penguin Specials.

In passing, I must refer to the work of the Ministry of Works and Planning, which is directed towards standardising and improving building practices and units. A very impressive complex of committees is engaged at this

moment. If the war vouchsafes them sufficient time, the building industry cannot but benefit by their labours. Indeed, they must be a major source of hope to the architectural profession. But I cannot discover domestic appliances in general come within the scope of their researches. For instance, the Committee on Electrical Installations is limited to "an enquiry into methods to be used from the point of entry into property to the point of delivery to an appliance." And in discussing the subject with one who must be described diplomatically as a very high authority in planning circles, I gathered that vested interests are held to be too powerful to contemplate anything so revolutionary.

Mention of vested interests brings me to the first of two arguments which may be brought against this programme of selection and control of design. That it affects a whole range of trade interests I do acknowledge without qualifying them in any way. It will affect patents, trade names, trade connections, adver-

tisers' goodwill and many other things which belong to the fabric of peace-time business. The war, too, has done this and worse with a heavy hand not to be resisted, but most enterprises have adapted themselves and survived. And on balance I take it that reconstruction is a national task comparable with war.

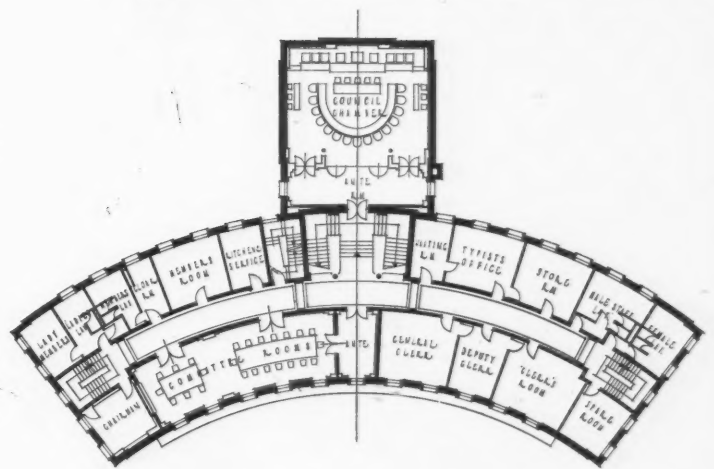
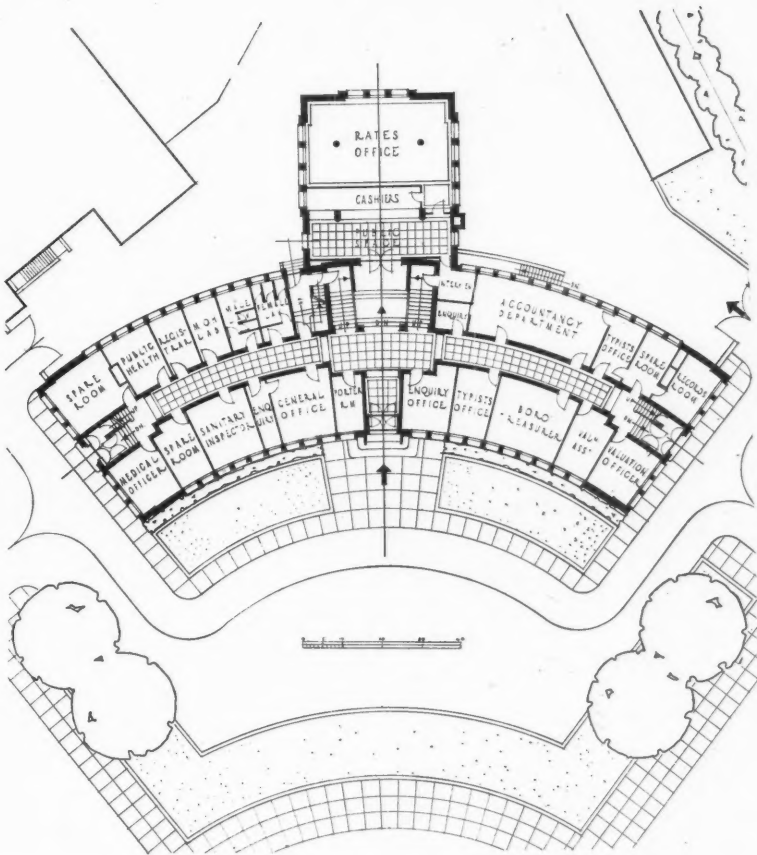
The second argument—to be taken more seriously perhaps—is that this very standardisation of design, if applied for any considerable period, would so restrict inventive genius that it would fix on us a standard which in ten years or less would be obsolescent. That this is not an idle fear can be gauged by reflection of what happened in certain great public services where the incentive to change was negligible. As we cannot foresee the future organisation of society, and the part which private enterprise or State control will play, it is unprofitable to look too far ahead. At least this can be said with confidence. We could give one great section of industry a fresh start, and we should get a new standard of values of what a man and a woman have a right to expect for their home.

I come now to a final question. Could this selection be made and specifications drawn up for manufacturers within a reasonable time? Time must be emphasised. We have not all time in front of us, even if we do not know our limit. And if the work is not done when peace comes, you can be sure it will then be considered as too late and likely to prejudice production. Well, let us say a year. I should say that within a year the bulk of the work could be done, given the right type of human machinery. With all due deference to the good intentions of MOWP, I do not think committees of some twenty odd persons representing every interest and trade body will do the job in time. Were the war to rival the classic ten years of Troy, I doubt if we should achieve anything concrete. I should want to see appointed for each particular field two persons with the job of making the selection, consulting with experts where they existed, and reporting their reasons for choosing this or that article as existing or to be modified. One of the two selectors should represent consumer interest rather than commercial interest, in the sense in which the Consumers' Research services work in America. The findings of the selectors would then be issued in the form of specifications to the trade, and manufacturers could work out their production plans in accordance with them. It should not be too difficult to find persons competent to carry out this task. We have already the precedents set by Utility Pottery and Utility Furniture. Opinions may differ on the merits of the designs approved for these trades, but those who read the article in the previous issue of THE ARCHITECTURAL REVIEW will agree that the time element is of prime importance. It is not satisfactory always to have to excuse designs, whether of tanks or furniture, with the plea that it was the best that could be done in the time.

We are only just beginning to learn by an accumulation of defeats that Production Weeks and Double Shifts are no substitute for the right design in the first place. Must we learn this same lesson all over again in rebuilding Britain?



M U N I C I P A L O F F I C E S



**Sir John Brown
and A. E. Henson**

*1, the curved facade of the new municipal offices at Friern Barnet, Middlesex.
The two plans illustrate the ground floor on the left, first floor on the right.*

SITE—The siting problem which faced the architect in designing the Friern Barnet municipal offices in North London, was to preserve as much as possible of an existing park, make the best use of a paved yard in front of the building, link it up with older structures to be retained, and overcome the difficulties of a position on sloping ground.

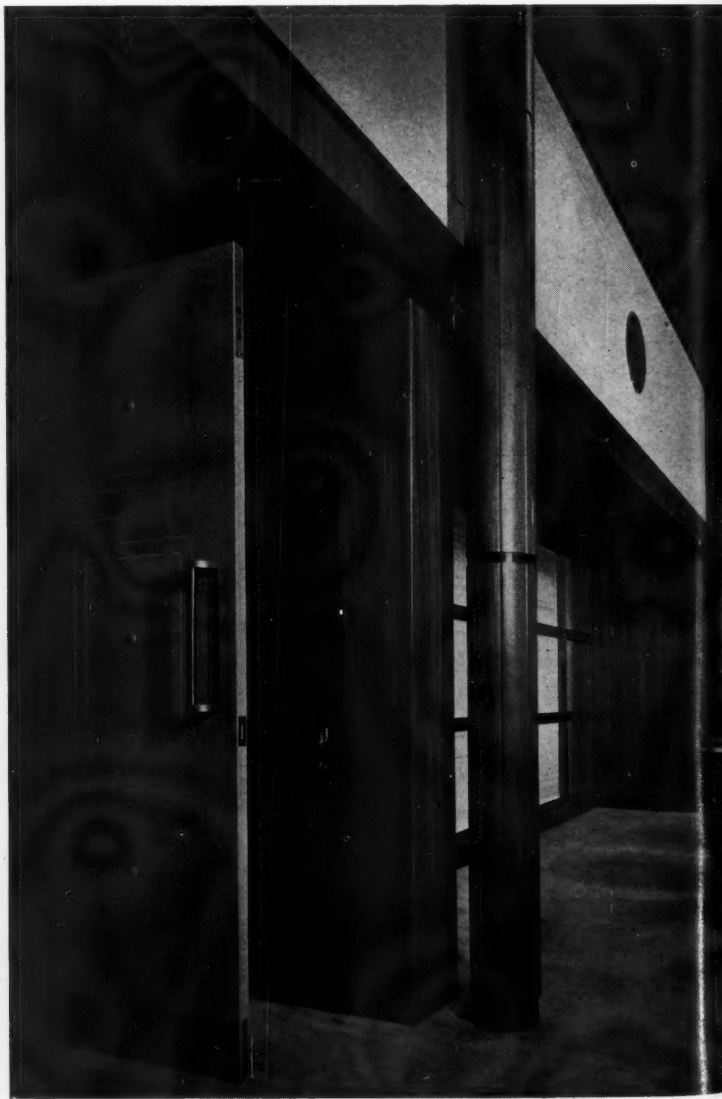
PLANNING—The central entrance is seen as the focal point from two roads. To reach it, one has to cross an architectural forecourt, laid out so as to stress the representational symmetry of the composition. By setting the building well back and curving its front, ample space has been obtained for drive-in, drive-out, and parking at the back.

The building consists of a curved main block with a rectangular back projection for the council chamber.

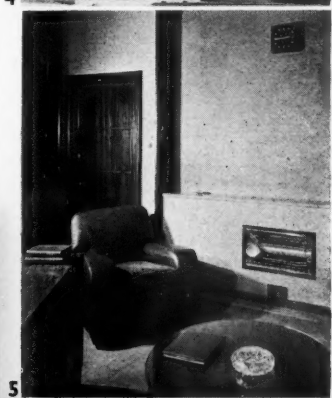
The main entrance leads into a central hall of moderate size, and, straight on, along the same axis, to the staircase and council chamber block. From the central hall curved corridors separate the main block into two symmetrical halves with offices on both sides and subsidiary entrances at the ends. The largest ground floor office, the one concerned with rates, is placed into the back projection beneath the council chamber. The first and second floors are similarly planned. By reserving the back projection on the first floor to the council chamber, and giving it a separate ante-room, it is well isolated from street and office noises.

CONSTRUCTION—External and internal brick walls, hollow concrete block floors, roof with steel trusses and Westmorland green slates.

INTERNAL FINISHES—The main staircase has Hopton Wood stone stairs and panelling, the council chamber walnut panelled walls with acoustic plasterboard above and wood block floor with close cover carpet. The walls and ceiling of the offices and corridors are plastered, the floors are of wood blocks. Walnut panelling is also used for the committee rooms. For the sanitary conveniences terrazzo tiling is used for both walls and floors.



MUNICIPAL OFFICES, FRIERN BARNET



8

The main entrance, just visible on the right in 4, leads into a hall of moderate size, and straight-on to the staircase, which connects the ground floor with the council chamber on the first floor. 6 and 8 show the staircase at first-floor level, with its polished marble piers, coffered ceiling, Hopton Wood stone paving, glass balustrades and decorative, if somewhat dated, electroliers. The council chamber, 7, has walnut panelling with acoustic plasterboard above. The tables and chairs are walnut, the chairs leather-covered. The ornamental details of the woodwork of doors and ceiling supporting shafts can be seen, 3. In the committee room, 2, the electroliers are again a conspicuous feature. The room can be divided into two by folding doors. Walnut panelled walls and walnut furniture.

The ground floor has bands of windows of moderate height, the first floor tall windows of somewhat traditional proportion. The detail of the stone dressing can be seen 9, 10 and 11. 11 is the main entrance, 10 a side entrance. On 9 the balcony railing should be noted as a characteristic ornamental detail.



9



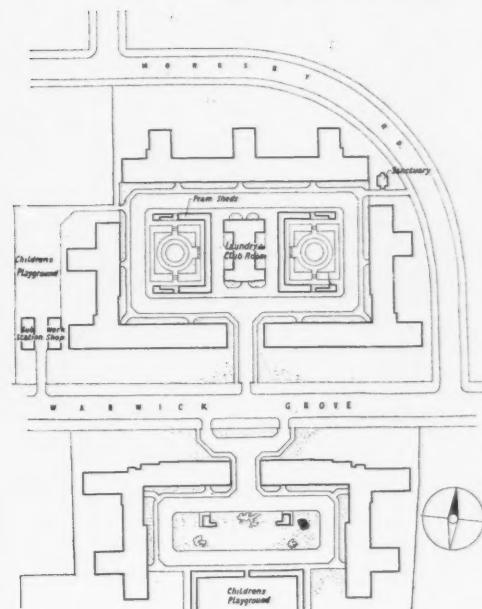
10



11



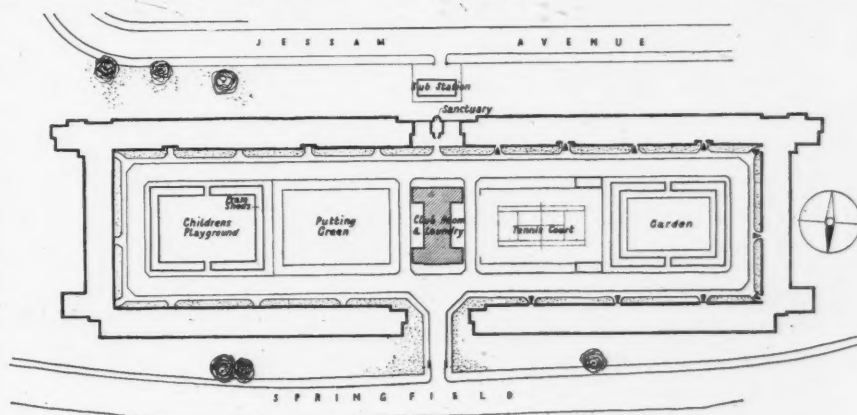
**Messrs. Joseph,
architects**

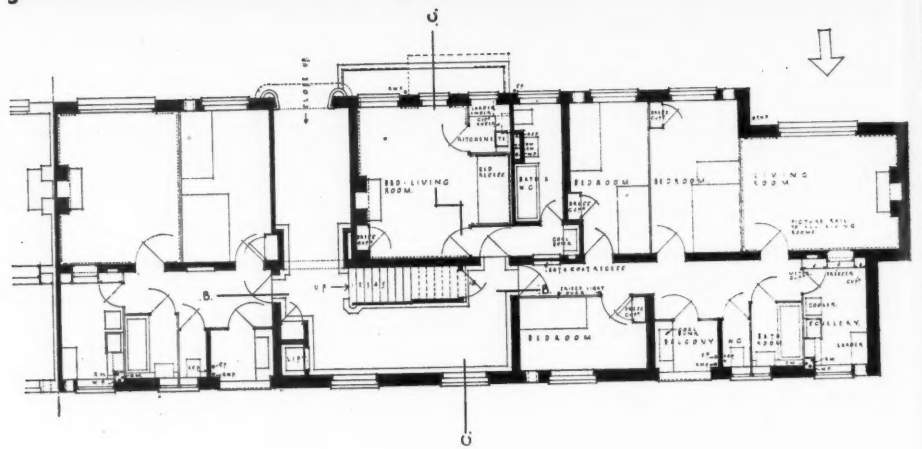


FLATS

GENERAL—The two schemes are erected on independent sites a few minutes' walk from each other, at Warwick Grove and Springfield, Clapton, London. They were built in 1938-1940 for the Hackney Borough Council. The total number of flats is 585, the total of rooms 1,582. 285 flats are at Warwick Grove, 300 at Springfield. 140 flats are of one room each, 138 of two rooms, 135 of three rooms, 154 of four rooms, and 18 of five rooms. So they obviously cater for married couples with children as well as for single men and women and childless couples. The rents are 6s. 7d. a week for the one room flats, 9s. 11d. for two rooms, 13s. 6d. for three rooms, 16s. 9d. for four rooms and 19s. 10d. for five rooms. The building cost was at a rate of 1s. 2½d. to

The Springfield scheme, 2, has a central courtyard of 580 by 130 feet. The community hall is in the centre. The sanctuary is just visible on 1, on the right.





IS.
 us
 Ha
 PI
 div
 str
 of
 spl
 of
 is
 W
 sp
 pri
 fla
 inn
 ag
 Ea
 sta
 gre
 pla
 the
 Th
 ha
 fee
 the
 ge
 pr
 ca
 Co
 wi
 9
 ca
 Fl
 Th
 et
 Al
 po
 pl
 all
 of
 on
 A
 bo
 W
 be
 ye
 th
 ve
 T
 St
 ea
 wi
 ro
 th
 ve
 to
 T
 m
 la
 ea
 dr
 m
 sc
 ti
 is

T
 ex
 th
 T
 ha
 eq
 bo
 la
 in
 ca
 ba

is. $3\frac{1}{4}$ d. a cubic foot. To keep rents as low as they are, the schemes rely on the usual Government grant of about 25 per cent., and London County Council and Hackney Borough grants of about 6 per cent. each.

PLANNING—The general principle is the quadrangle with buildings around divided up into two U-shaped blocks, or three blocks, two of L-shape and one straight. Air can thus circulate satisfactorily. The Warwick Grove scheme consists of one and a half such quadrangles, north and south of Warwick Grove with its splendid old trees. The quadrangle on the north is complete with three blocks; of the southerly one only the northern half has been built. The Springfield scheme is of two very elongated U blocks around a quadrangle of 580 by 130 feet. The Warwick Grove quadrangle is smaller: 275 by 155 feet. By keeping the open spaces in the centres on such a generous scale, the disadvantages of the quadrangle principle have been overcome. Dolphin Square, the largest block of "luxury" flats in London built on the same principle (but without through ventilation) has an inner square of about 250 to 500 feet. The buildings are ten stories high, as against the five stories of the Clapton flats.

Each quadrangle has a free-standing Community Hall in the centre, club room (with stage and dressing rooms) on the first floor, and a washhouse and drying room on the ground floor below. A sanctuary, 130—140 pram and cycle sheds, and railed-off playing grounds for children are also provided. The pram and cycle sheds are for the time being converted into shelters. Turfed gardens are to be laid out after the war. The individual flats are grouped three to a staircase, with a square or oblong entrance hall instead of the usual long and narrow passages. This adds considerably to the feeling of spaciousness which the architects were particularly anxious to create throughout the two schemes. No living-room has a northern aspect. Planning in general and in details—for instance the kitchens—shows a remarkable skill, based probably on the unusually wide experience of the architects who, in the course of their career, have built flats of all kinds and classes for close on a hundred thousand people. **CONSTRUCTION AND EQUIPMENT**—External walls are 14 in. thick, faced with sand-faced multi-coloured bricks in dutch bond. Central backbone wall of 9 in. construction for supporting floors and roof, with 9 in. walls enclosing staircases. Staircases of reinforced concrete, finished with grano and carborandum. Floors and flat roofs of hollow tile construction.

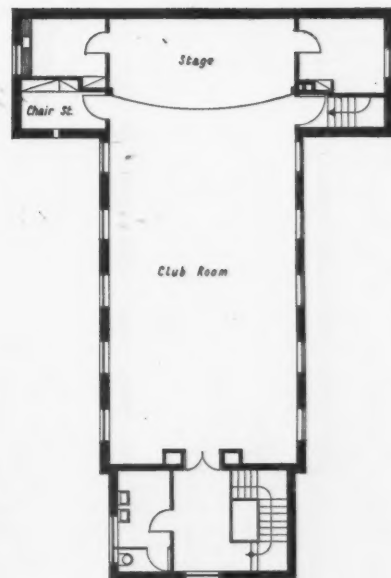
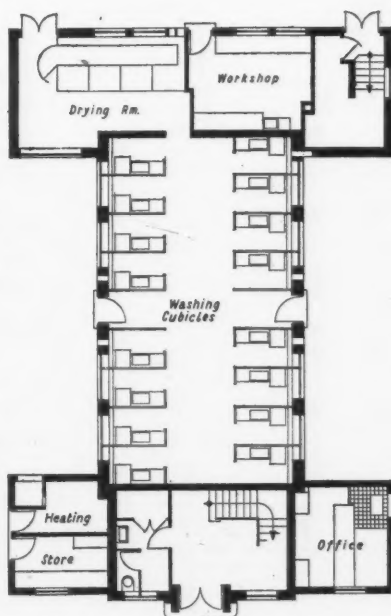
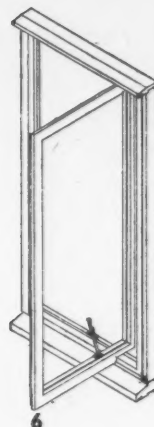
The plumbing and hot and cold water services have all pipes, branches, fittings, etc., of standardized sizes. All pipes, where practicable, are encased in ducts. All flats have bathrooms separate from the kitchens. Bathrooms are equipped with porcelain enamelled baths and basins. Living-rooms have tiled fireplaces of pleasant design, in the other rooms heating is by electric fires. The kitchens are all-electric, appliances can be hired from the Borough Council. The chief supply of hot water is from electric heaters, but gas for heating and cooking has been laid on as an alternative.

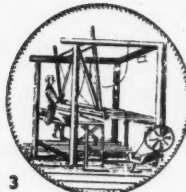
A hatch connects kitchen and living-room. All living-rooms have metal window boxes outside their windows. Wood coal bunks are provided on the balconies. Windows are of wood, not metal: of the double-hung sash type to living rooms and bedrooms, of the casement type to kitchens, bathrooms and w.c.'s, and of a strong, yet light section. In the Community Hall the windows are vertical pivot-hung. In the flats themselves, where windows are on their own (as in bathrooms) they are also vertically pivot-hung. None of the windows is of fixed lights. All can be opened. The pivot-hung windows have obvious advantages in cleaning.

Staircase walls to flats are tiled full height and electric service lifts are provided to each staircase. The floors are finished with a patent composition flooring to all flats, with quarry tile skirtings and cills to living-rooms, bedrooms and halls. Glazed screen and door is provided to the larger flats between balconies and halls for light and ventilation. Kitchens, bathrooms and w.c. walls are tiled to a height of 5 ft. and plastered above.

The club room has lino dado with painted plaster above, metal skirting and wood block flooring. The communal laundries are splendidly equipped with sixteen cubicles for each of the two schemes. Each cubicle has sink and draining board, mixing valve over sink and electric washing machine. Electrically operated drying tumblers and water softening plant are also provided. Walls and partitions are tiled full height. The use of washhouse and drying room is included in the rent.

The scale of the two schemes is impressively visible in 5 and 8. 5 is an exterior view with the brick frontage successfully set against the old trees of the neighbourhood. 8 is view of one quarter of the Springfield quadrangle. The community centre which can be just seen on the right of 8 contains the hall, 7, with dance floor and stage on the first floor and the splendidly equipped laundry, 4, on the ground floor. Note the tiled walls, and electric boilers and wringers. The kitchens of the flats, 3, are also surprisingly lavish in their equipment. It is unusual to see so many amenities supplied in municipal flats at low rentals. The window in 3 is of the wooden casement type. The single unit ones such as, for instance, used in the bathrooms are pivoted for easier cleaning, 6.





The earliest tokens were issued in 1787 by the Parys Mining Company, a firm belonging to Charles Roe, the adventurous Macclesfield silk merchant. There were no watertight compartments between the various trades in these early days of industry. As their mines in Anglesey hauled copper, copper tokens were an especially appropriate venture of theirs. The druid's head, 1, to be found on all their tokens, is an exceedingly dignified device, and, as a substitute for the head of a monarch which one would expect on coins, highly characteristic of the Hafod atmosphere of the period. The normal coin as a rule had an allegorical figure on the reverse. This remained popular with the designers of the private tokens. Figures of Commerce, of Hope, of Britannia, appear quite often. The revived spa of Holt in Wiltshire uses a Fame, of a still remarkably baroque appearance, 2. The appearance of the handloom on Norwich tokens, 3, has a similar meaning. The staple trade of the city serves, in a more realistic way, the same purpose that an allegory might have fulfilled. It is incidentally worth mentioning that Norwich in the seventeen nineties apparently did not realize yet the coming of the machine age.



As the products of cities, so the products of individual manufacturers, appear on tokens and the products stocked by retail shops. Bisset's Alabaster, Spar and Petrification Warehouse in Birmingham, 4, shows a symmetrical group of neo-classical vases and obelisks—no Gothic forms appear yet—and Peter Skidmore advertises, 5, his Furnishing Repository in 123, High Holborn, by illustrating a fireplace. Skidmore was one of the busiest makers of collectors' tokens. Only one of his coins, we are told, was struck for commercial circulation. All the others—about two hundred—served collectors exclusively. His series of London churches and gates was a favourite, and still is. The new spirit of technical enterprise showed itself not only in the presentation of industrial products, but also in proud pictures of the daring new engineering structures for purposes of transport. The pre-railway era of course had not arrived yet. But bridges, tunnels and canals were constructed as bold at least then as our boldest structures are now. 6 shows the two and a half miles long Thames and Severn Canal tunnel near Sapperton (Ernest Gimson's Sapperton).



The canal company by illustrating the tunnel advertises its activity. For the same reason Holt in Wiltshire shows Spa House, 7, and shrewdly adds Neat Lodgings to counteract the gloomy appearance of the building. In Bath, where architecture must have been the pride of all, not only the pump room is recorded on tokens, but also such urbane vistas as Poullney Bridge and Bath Street, 8. On the Bath Street halfpenny we read the significant inscription: Gold, Silver and Copper I can command. Value one halfpenny on demand. So these Bath tokens must have been intended for exchange. Mr. Ratley's business in Duke's Court, St. Martin's, 9, where pictures were sold (with the help, it seems, of clamorous sales talk) cannot have commanded a reputation widely enough known to coin semi-legal tender. His tokens were no doubt exclusively advertisement, even if collectors were prepared to pay for them.



Mr. Ratley also sold—so the reverse of the token tells us—"shells, ores and minerals." There was no strict separation between dealing in art and dealing in natural curiosities, or between the curio shop and the showman's booth. The snake, 10, advertises Bayly's shop in Piccadilly. His only other token has a crocodile. But T. Hall in the City Road, who calls himself "first artist in Europe for preserving birds, beasts, etc.," would not have issued a token with the portrait of Mrs. Newsham, the White Negress, 11, if he had not ran a side-line in freaks. The negro on the farthing, 12, has quite a different story. It is revealed by the inscription: Am I not a man and a brother. So this token was a piece of anti-slavery propaganda.



Political tokens, often in close alliance with contemporary cartoons, are extremely frequent. Thomas Spence, bookseller and dreaded pamphleteer, issued a large number of them. French Liberty, starving in front of an empty grate, and English Slavery, heartily feeding on beef and beer, 13 and 14, come from his shop. Some of these political tokens are of a directness and aggressiveness that would be impossible in our age of a free press. Liberty and not Slavery for instance, 15, shows the Jacobin cap and Pitt hanged.



John Wilkinson (1728-1808) was one of the first to undertake private coinage. He was one of those forceful, adventurous and unscrupulous characters that have made British industry, the son of a farmer who worked at the same time as foreman at an iron furnace. John Wilkinson manufactured iron, cast tubes and parts of bridges, built the first iron bridge ever erected—at Coalbrookdale, where his workshops were situated. He was Priestley's brother-in-law and a friend of James Watt. His was an all-pervading enthusiasm for iron. In his will he insisted on being buried in an iron coffin.

The copper tokens discussed in the following article are the outcome of a temporary shortage of coins in England, due to a sudden steep rise in the price of copper and an equally sudden and steep rise in the employment figures relating to industry and commerce. To overcome this shortage one or two of the most enterprising firms decided in 1787 to strike their own coins. They were followed by others and soon a collecting craze must have set in, comparable only to the early frenzies of the philatellists. But there is one difference between stamps and the copper tokens. Stamps were a prerogative of governments, and the appetites of collectors were therefore specially catered for. The tokens of the late eighteenth century on the other hand could, it seems, be issued by anybody. Whether the flood of tokens issued between 1790 and 1800 spoiled the market value of the genuine exchange tokens is not on record. What it certainly did was to raise, or at least to keep up, the æsthetic and iconographical interest of the tokens. The best die-sinkers worked on them, men such as the Wyons, Hancock, James and Jacobs. They form, moreover, with their designs of buildings, their emblems, portraits, and their social and political thesis set forth in word and picture, a source of prime importance for information about taste and views of the period. It is surprising how little known they are outside the narrow circle of their twentieth century collectors. The illustrations on this page, the following pages, and the frontispiece to this number of THE ARCHITECTURAL REVIEW are, where engravings, from The Virtuoso's Companion and Coin Collector's Guide, 1795-1796; where photographs, from the collection of the author of the article or from the plentiful stocks of Messrs. Spink's. The photographs were taken by Dell and Wainwright, staff photographers to THE ARCHITECTURAL REVIEW, and, needless to say, appear in varying degrees of enlargement.



17

Centre : the Botanical Gardens at Bath, with an inscription from the Bible. Right : a picture of a plough, with an inscription characteristic of the late eighteenth century: Success to the Cultivation of Waste Lands. But the cultivation of waste lands at that time meant more often than not enclosures. So Thomas Spence brought out the token on the left with its dilapidated farmyard and a quotation from the Deserted Village: "One only master grasps the whole domain."

Eighteenth century pence and ha'pence

By F. D. Klingender

I should be happy, if a few observations that occur to me upon a subject that I know to be extremely interesting to many persons of taste throughout Britain, were deemed worthy of being diffused through the medium of your book: as they are humbly intended to promote improvement in a polite art, intimately connected with the Belles Lettres, and on which, the reputation of the present times for industry, ingenuity, and arts, must, in a great measure, depend at periods of the latest posterity.

James Wright, Junr., Esq., F.A.S.S. and Perth: Introduction to *The Virtuoso's Companion and Coin Collector's Guide*, M. Denton, London, 1795-1796.

TEN years before the suspension of gold payments by the Bank of England in 1797 certain pioneers of the industrial revolution had taken a drastic step to remedy a minor crisis in the country's monetary affairs which had been developing with increasing momentum since before the accession of George III. Owing to a steep rise in the prices of silver and copper, the royal mint had practically suspended the issue of small coins¹ at a time when the growth of industry and the wholesale transformation of largely self-sufficing cottagers into wage labourers were daily increasing the demand for small change. The private copper tokens issued to meet this demand merit attention to-day, not only as historical documents, but also as striking examples of industrial design.

Between 1787 and 1792 the Parys Mines Company, established in 1764 by the Macclesfield silk manufacturer Charles Roe and his associates to exploit the rich copper deposits that had been discovered in the island of Anglesey, is stated to have issued almost 9 million pennies and more than 3½ million halfpennies.² A separate set of tokens was circulated between 1789 and 1792 by the parent company, Roe & Co., who maintained a copper works at Macclesfield. Both series were

minted at Birmingham from designs by J. G. Hancock, as were also the penny and halfpenny tokens put into circulation between 1787 and 1795 by John Wilkinson, the great ironmaster.

Nor was it only the new metal industry that participated in the movement. The revolution in transport is reflected in the tokens issued by canal companies, turnpike trusts and mail coach offices, and the boom in the coal trade in those of the Low Hall Colliery in Cumberland. The older textile trades are well to the fore: wool in tokens from Norfolk, Somerset, Shrewsbury and Rochdale; flax and hemp and the associated manufacture of sail canvas in Plymouth and Dundee. But, curiously enough, apart from the Nottingham stocking trades, the newer textile industries, especially cotton, do not seem to be represented by a single manufacturer's token of this period.

In their exquisite designs these genuine currency tokens already reflect a rich diversity of interests and aspirations. It is only fitting to find portraits of men like Roe or Wilkinson in the place that had hitherto been reserved for the likenesses of sovereign princes, 16. The classical allegory expressed in robust figures of "Industry," "Commerce," "Fame," 2, or in emblems of the Republican virtues is no less appropriate, and it utterly lacks that self-conscious mawkishness which distinguishes the same symbols in Victorian designs. Characteristic, too, is the combination of severely classical forms with Ossianic romanticism in the Druid's head surrounded by a wreath of oak leaves on the Parys Mines Company's tokens, 1. But the most fascinating designs in this group are those illustrating actual working processes or the latest achievements of industrial technique.

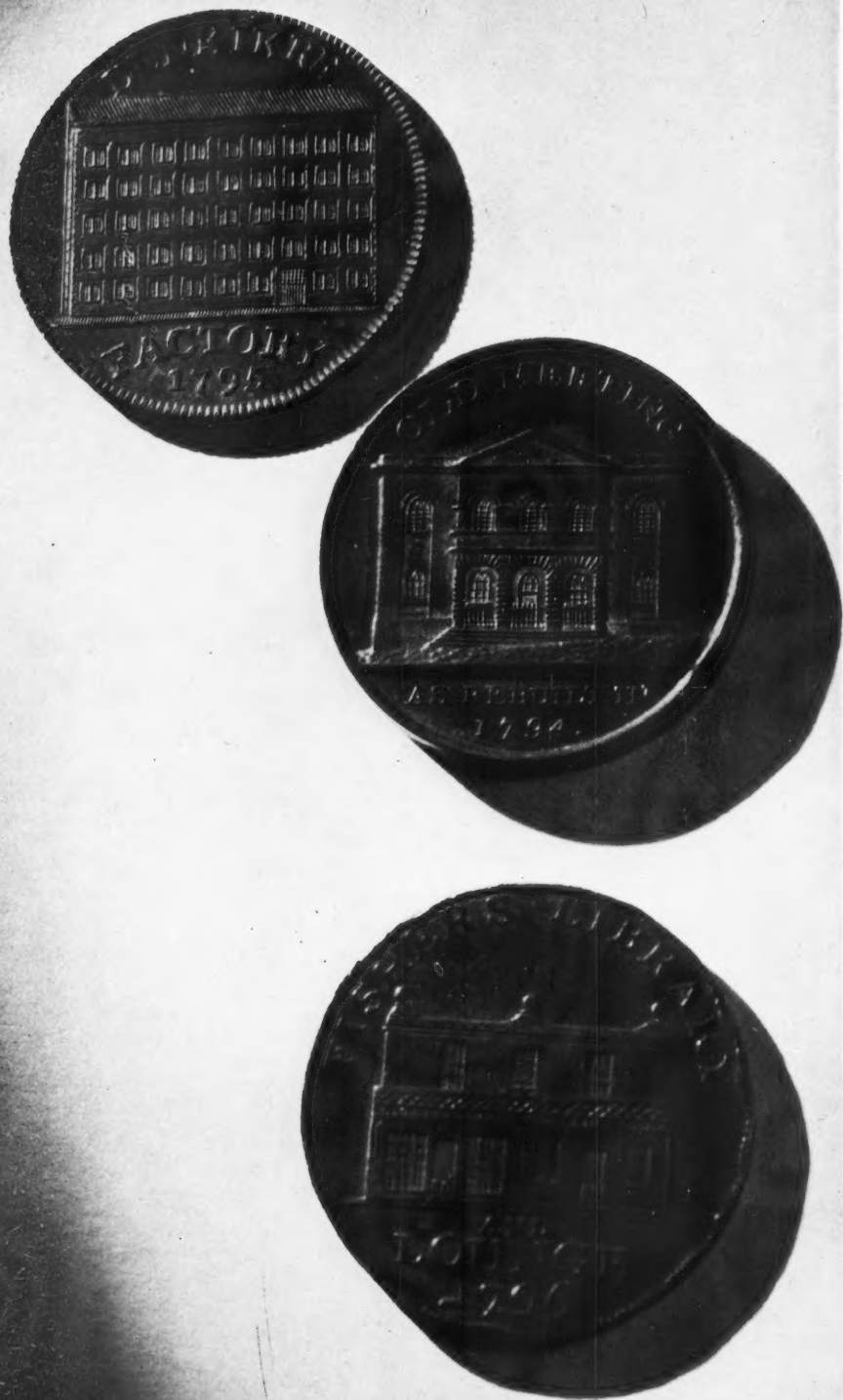
It is extremely significant, for example, that classical symbolism alternates with contemporary "reportage" on the reverse designs of Wilkinson's coins. While some of these show Vulcan working at his forge, the majority display a workman standing at an open furnace and operating the cyclopic hammer of the latest type of power forge, 20. Of similar interest as documents of the industrial revolution are the illustrations of a

rolling-mill and power forge on the halfpennies issued in 1792 by John Morgan, ironmaster and tin plate manufacturer of Carmarthen, 22. By concentrating on the essential operative parts of the forge, the scale of which is accentuated by the low viewpoint and thrown into relief by the small figure of the worker, Hancock, the engraver of the Wilkinson tokens, achieved a design of great simplicity and power. The main interest of the Carmarthen tokens, on the other hand, is that they show detailed interior views of spacious factories in which the rhythm of work is emphasized, despite the minute scale, by the cleverly handled perspective of the bare brick walls and heavy roof beams. Among exterior views of factories are the gaunt five-storey block of the Dunkirk Woollen Manufactory in Somersetshire (1795), 18, the tall cones of glass works in Bristol and Dundee (1796-7), a long, arcaded, two-storey paper mill at Maidstone (1795), Boulton & Watt's Soho Manufactory, erected in 1764, their "New Brass Works" of 1792 at Birmingham (illustrated on page 30), and the famous steam-driven Albion Mill, built by Wyatt in 1787, which brought the industrial revolution into the heart of London.

On most of the textile tokens traditional emblems, such as the wool-sack or fleece, alternate with representations of time-honoured working processes. An exemplary design of a hand-loom weaver at work appears on tokens issued in various centres between 1791 and 1797, 3; other pieces show a woman at her spinning wheel, a lace-maker, a man heckling flax, and a girl watering cloth that has been laid out for bleaching. No less traditional is the horse-driven gin which appears on the Low Hall Colliery token, but the last word in lifting machinery, the Inclined Plane constructed in 1789 by William Reynolds to raise coal and iron ore at Ketley, is illustrated on the reverse of a token struck in 1792 to celebrate the famous Iron Bridge at Coalbrookdale, constructed in 1779, 22. An even more imposing engineering feat, the iron bridge at Sunderland (1796, span 236 ft., height 100 ft.) was similarly commemorated (see the photograph on page 30), while the

¹ Cf. C. Oman: *The Coinage of England*. Oxford, 1931.

² Cf. A. W. Waters: *The Token Coinage of South London*. Leamington Spa, 1904. The standard book on tokens in which all but one of the pieces discussed in this article are illustrated is R. Dalton and S. H. Hamer: *The Provincial Token Coinage of the 18th Century*. London, 1910-17.



The copper tokens discussed in these pages are a source of paramount and far too little recognized importance for the understanding of late eighteenth century architecture in Britain. The Dunkirk Factory in Somerset (with the inscription on the reverse: Success to the Staple of England) should be compared with the factory at Malmesbury and the Stroud Valley factories, illustrated on pages 52 to 55. The Old Meeting House is an example of the most stately Quaker architecture. Birmingham, when it was built in 1794, was already one of the centres of Quakerism. Fisher's Library and Lounge take us to Eastbourne, one of the many watering places coming into fashion about 1800. The reverse says somewhat primly: Prosperity to the Gentry who visit Eastbourne.

tokens issued by the Thames & Severn Canal Co. in 1795 from designs by Hancock, illustrate the entrance to the tunnel, two and a half miles long, at Sapperton, 6. Other canal tokens depict the types of barges then in use, 23, or charming landscapes. Progress in road transport is reflected by the mail-coach and four with the device SPEED, REGULARITY AND SECURITY which appears on the halfpennies of the London Mail Coach Office at Lad Lane.

Some of the specimens just mentioned are not, strictly speaking, manufacturer's currency tokens, but were circulated, like the bulk of tokens struck in the mid-nineties, by retail traders: grocers, ironmongers, haberdashers, publicans and book-sellers in all parts of the country. These swamped the market with countless local issues of restricted circulation and dubious value, as they had done in earlier phases of British monetary history, notably during the Civil War. At the same time the beauty of the pioneer series had immediately appealed to collectors, and the collection of local tokens had become a fashionable pastime. This particular market was eagerly exploited by the token dealers, but many limited issues were also commissioned by collectors themselves for exchange among their fellow enthusiasts. All these tokens were manufactured in Birmingham or London³, and the many forgers, who had hitherto specialized in imitating the worn regal coins still in circulation, suddenly found their trade quasi-legitimate and booming. Not only did they fake the more reputable industrial tokens, substituting lighter copies for the originals, but they produced genuine tokens for the various categories of private issuers, and they also speculated on their own account by coining varieties without issuer's name which they sold in bulk to anyone willing to put them into circulation. The business of issuing tokens was a profitable one, provided it was done on a large enough scale, for we learn from a contemporary source that the manufacturer's charges for one ton of $\frac{1}{4}$ d. tokens amounted to £150, while their circulation value was £214 13s. 4d., leaving a profit to the issuer of £64 13s. 4d.⁴

But apart from being a profitable speculation, the tokens had also acquired a further attraction for prospective issuers in the early 1790s. Universally current, as they were, in their function as small change and as collectors' objects, they had become a superb medium not only for commercial advertisement, but also for every other type of propaganda, and that at a time when the minds of men were teeming with new ideas in science, technology and economics, when their hearts responded to the appeals of the philanthropists⁵ and when their passions were inflamed by the challenge of the French Revolution. In reflecting all these interests and aspirations, the tokens are a matchless record, not of the opinions of fashionable society in the metropolis, but of the outlook of the people at large in all parts of the country.

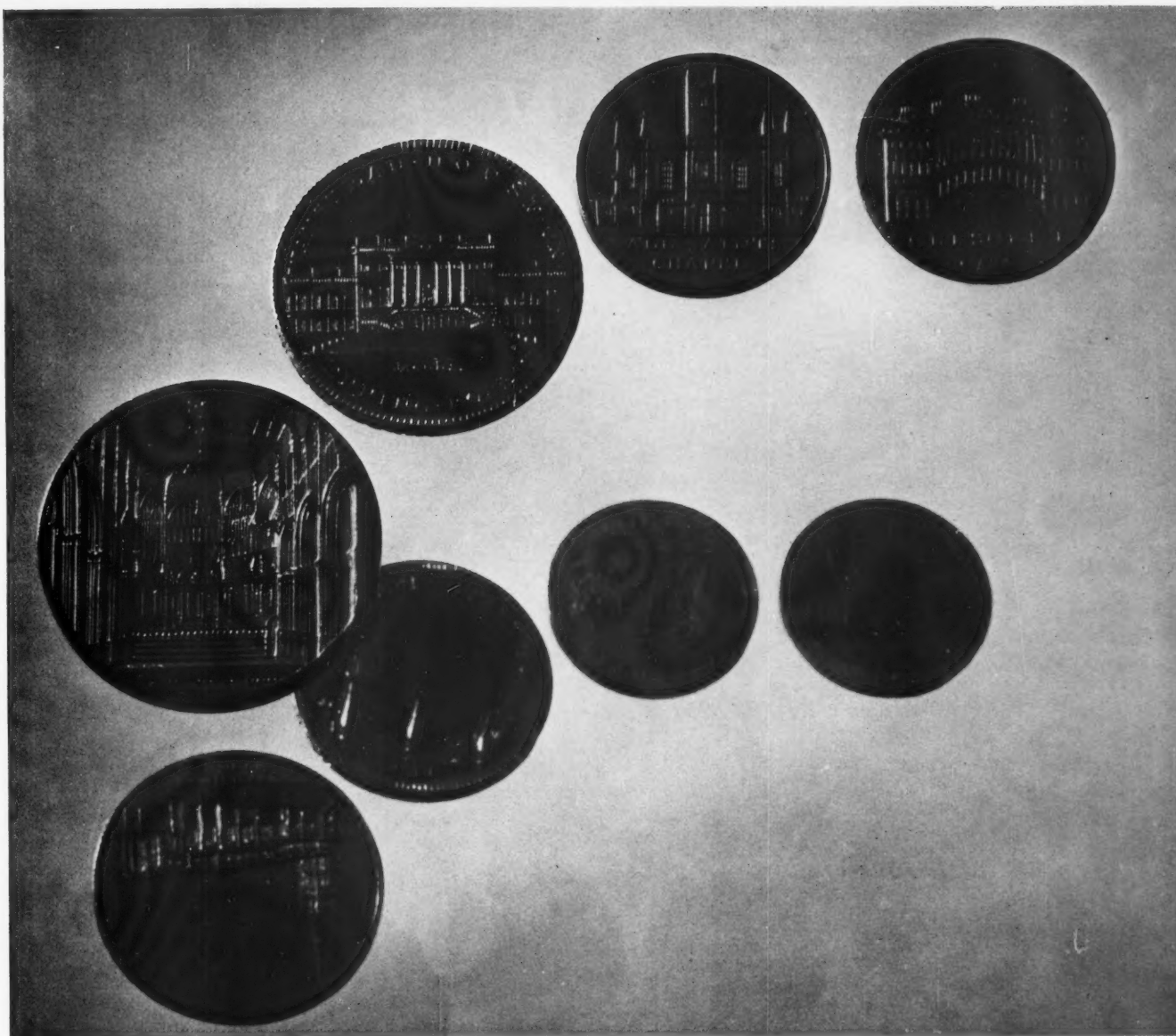
The naive enthusiasm with which varied and, at first sight, incongruous interests are advocated side by side, may be illustrated by the delightful tokens designed by the Perth artist, James Wright, junior. His Dundee penny of 1798, for example, has on its obverse a fine portrait bust with the legend ADML. LD. DUNCAN BORN HERE 1731 DEFEATED THE DUTCH FLEET 1797, while on the reverse a charming group of Adam and Eve in the Garden of Eden is surrounded by the caption 23000 INHABITANTS IN DUNDEE VID. STATISTICAL ACCOUNT BY R. SMALL D.D.—BE FRUITFUL AND MULTIPLY. GEN. 1.28. Wright's other designs show that he was as interested in history and archæology as he was in economics and in the industrial development of his native Scotland.⁶ One side is generally adorned by some historic

³ The sole exception is the tokens manufactured and issued by Hands of Sheffield.

⁴ Cf. Waters, op. cit.

⁵ Both Howard's appeal for prison reform and Wilberforce's campaign for the abolition of slavery are reflected on the tokens.

⁶ How conscious Wright was of the historical significance of the tokens as documents of their time is shown by the introductory essay which he contributed to *The Virtuoso's Companion and Coin Collector's Guide*, published by M. Denton in London in 1795 (see the motto to this article).



19

Four more architectural tokens: St. Michael's, Coventry, raised to cathedral status in 1918 and destroyed by the Nazis in 1940. The token, with the interior of the church on one side, the exterior (seen on the photograph in a mirror) on the other, is one of the most ambitious efforts of the period. Wanstead House in Essex, a memorial to the pulled-down masterpiece of Colen Campbell (of Vitruvius Britannicus fame) has on the reverse a globe on a stand between rose and thistle. All Saints Chapel, Bath, burnt down in 1941, stood in the focal point towards which the double curve of Lansdown Crescent was orientated. The Crescent of 1796 is not one of the Bath crescents, but the chief architectural feature of late eighteenth century Buxton (see Kenneth Rowntree's painting on page 40).

building, while a modern factory, a busy harbour scene, or some working process, such as flax heckling or fishing, occupies the other. Contemporary buildings, such as Edinburgh University, Dundee Infirmary or the Montrose Lunatic Asylum, also appear. But what is most striking is his passion for historical and statistical precision. He rarely illustrates a building without indicating its date, for example, OLD TOWER FOUNDED 1189 or CROSS TAKEN DOWN 1777; and he proudly records such economic details as 3336 TONS FLAX AND HEMP IMPORTED HERE IN 1796. VALUE £160,128 (which relates to Dundee) or 46 WATER: MILLS FOR BLEACHING, PRINTING, COTTON WORKS, CORN &c. WITHIN 4 MILES OF PERTH. It is not surprising that a fine portrait of Adam Smith (by one of the Wyons of Birmingham)⁷ should appear on one of the Scotch tokens, just as Priestley appears on Birmingham and Newton on London tokens, side by side with Tom Paine and other leading radicals, 21. For, significantly enough, the interests most in evidence on the tokens reflect the most advanced tendencies of the time in politics and economics, no less than in art and science.

The taste for architecture is reflected by scores of tokens from all parts of the country. Indeed, certain manufacturers found it profitable to issue extensive series illustrating noted buildings for collectors. Such are Kempson's "London Gates and Churches," his Birmingham and Gloucester buildings, or the rival series of London

buildings issued by Skidmore, 19, 24. A fascinating series of Coventry views was designed by the local antiquarian Thomas Sharp, 19. Other tokens illustrate the eighteenth century architecture of Bath and Bristol, or the Gothic cathedrals, castles, colleges, of Norwich, Canterbury, Cambridge and countless other towns. Many of these tokens, especially those designed by Wyon for Kempson, but also those by Wright or Sharp, are as masterly in their clear and harmonious presentation of complex structures on a minute scale, as some of the industrial tokens. Though less accomplished, Jacobs' dies for Skidmore's tokens are charming illustrations of a London of which the last remains are rapidly vanishing. It is, in fact, in their quality as records that the architectural tokens are most interesting to-day. Although some of the buildings illustrated, such as the London City Gates, had already disappeared when the tokens were struck, many others show mediaeval buildings as they appeared before they were disfigured by nineteenth century restorers⁸, or charming minor eighteenth century architecture, such as dissenters' chapels, subscription libraries, or shop-fronts of which no other record has survived, 18, 25.

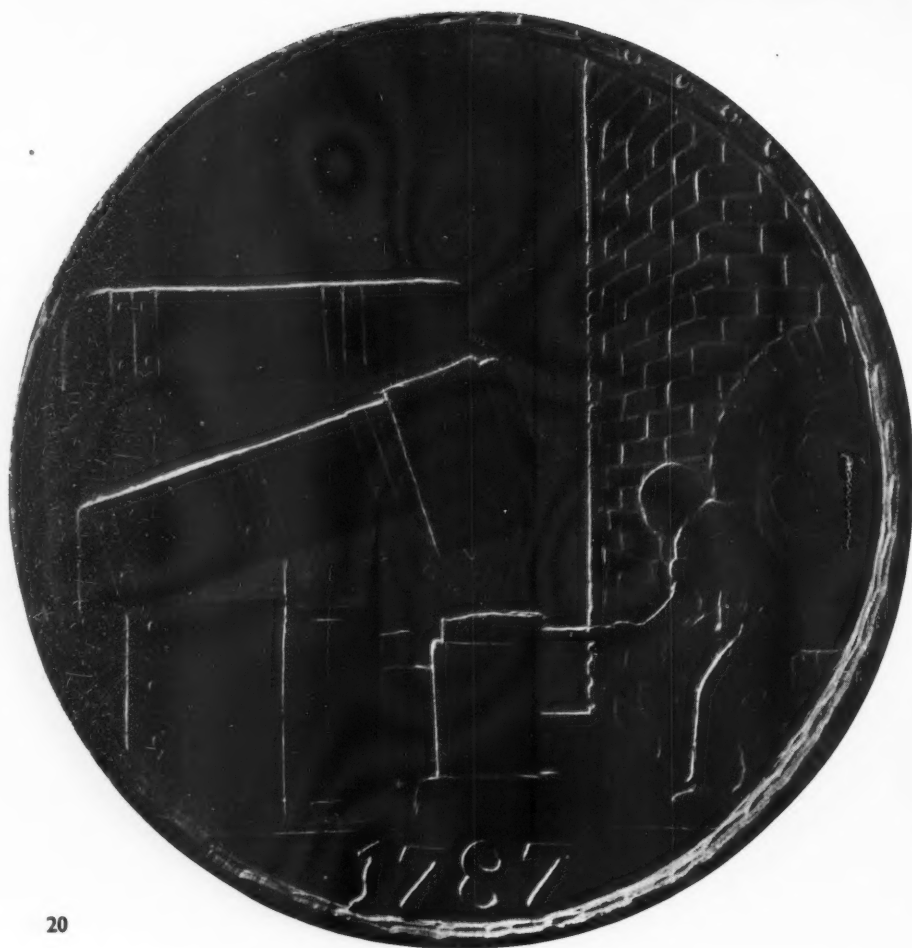
Much of this enthusiasm for architecture and history arose from a naive spirit of local patriotism. One may smile at Richard Fowke, a farmer of Elmsthorpe in Leicestershire, who issued a private token illustrating the ruins of the local church with a wheatsheaf, plow and harrow on the reverse, and bequeathed to posterity a manuscript entitled "The Creation of the World and of Elmsthorpe."

⁷ A warning note is already sounded, however, on a Paisley penny of 1798 which illustrates the Abbey Church, FOUNDED (CIRCITER) 1160, AS REPAIRED IN ITS ORIGINAL STILE, A.D. 1788.

But it was precisely this local pride that gave vitality to the æsthetic and historical pursuits of the time by linking them to the every-day interests of the people. There was no sign as yet of that fatal isolation of art from science and architecture from technology, which blinded the Victorians to the æsthetic possibilities of new materials and made their crafts expire in archaeological pedantry.

The tokens issued by small tradesmen mainly for advertisement also illustrate the spontaneous combination of practical motives with the wider interests of the time. Often the former are scarcely evident, even the issuer's name being relegated to the inconspicuous outer edge lettering. On other tokens the link is provided by some general device. A grocer, for example, may embellish his token with a tea chest bearing the East India Company's mark or Chinese lettering, and the legend: SUCCESS TO THE COMMERCE OF BRITAIN, LIBERTY AND COMMERCE, PEACE, INNOCENCE AND PLENTY, MORE TRADE AND FEWER TAXES, or simply GOOD TIMES WILL COME. Other captions refer to some particular trade or locality, for example: SUCCESS TO THE CIDER TRADE, MAY HOPS FOR EVER FLOURISH, GOD PRESERVE THE PLOUGH AND SAIL, SUCCESS TO THE FISHERIES, LET GLASGOW FLOURISH or PROSPERITY TO THE GENTRY WHO VISIT EASTBOURN, 18. But even the pieces that are less discreet charm by their naivety. Who could resist the attractions of the elegant ladies' shoes, of the hats, gloves and umbrellas, the glasses and tea sets or the beautiful fenders and grates that are displayed on the tokens issued by Carter's Ladies Shoe Manufactory in Jermyn Street, Clarke's, Haber-

⁸ Peter (1767-1822) and Thomas Wyon (1767-1830) in partnership, ca. 1796-1800. On this famous family of medallists, cf. L. Forrer: *Biographical Dictionary of Medallists*, Vol. VI, 1916.



20



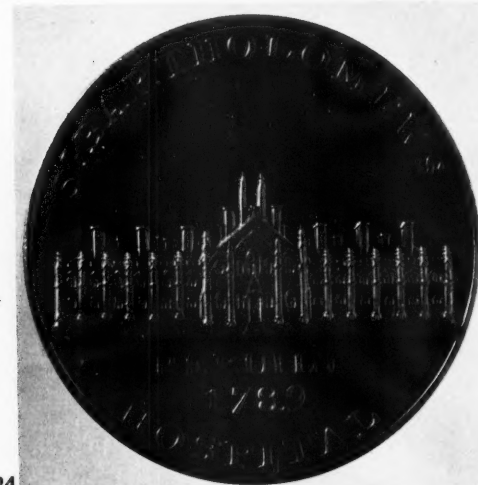
21



22



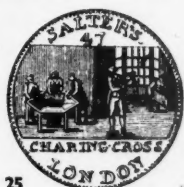
23



24

20. John Wilkinson's forge, one of the earliest tokens issued. I. G. Hancock's design, showing the gigantic steam hammer, is truly monumental and admirably fitted into the circle. Its reverse is the portrait of Wilkinson, illustrated 16. While Wilkinson's head appears on his tokens exactly like the heads of kings on official issues of coins, the portraits on 21 have a different meaning. On a beautifully sharp Wyon token of Kirkaldy Adam Smith, the town's most distinguished son, is portrayed. Sir Isaac Newton's profile is on the token to the right, that of Tom Paine on the one in the centre. The appearance of Paine in the place where we are wont to see monarchs' heads, shows the political significance of these medal-like issues. Newton and Adam Smith also stood for enlightenment and progress. 22. two more of the tokens in which the works of industry play the same role. The interior of John Morgan's Carmarthen iron works is on the left. Morgan's tokens had genuine exchange value. He issued five tons of them. On the right is the inclined plane at Ketley, Gloucestershire, constructed by William Reynolds to haul coal and iron. The canal barge, 23, was issued by the secretary of the Basingstoke Canal Company. 24 shows a little-known example of early gothicism: St. Bartholomew's Hospital, Gloucester, as rebuilt in 1789.

dashers of Norwich, Hancock's Umbrella and Coin Shop in Holborn, William Hallam, dealer in Glass and Staffordshire Ware in Birmingham, or Schooling's, Ironmongers of Bishopsgate? Even the token on which Salter's, of 47, Charing Cross, describe themselves as the CHEAPEST HAT WAREHOUSE IN THE WORLD (illustrated on page 30) is redeemed by its design which shows a workshop on one side and a pleasing shop-front on



25 The advertisement of a hat shop. The quality of the modelling cannot be seen so well in these contemporary engravings as in the photograph on page 30.



the other, 25. And the same applies to the Bristol token of 1793 which says: I WANT TO BUY SOME CHEAP BARGAINS—THEN GO TO NIBLOCKS, IN BRIDGE STREET, for that dialogue issues from the mouths of two grave and exquisitely old-world gentlemen, while the reverse illustrates the elegant bridge which was the locale of the daring Mr. Niblock's establishment. The only discordant note is struck, significantly enough, in some tokens issued by patent medicine pedlars. Those, for example, which advertise Basil Burchell's FAMOUS SUGAR PLUMBS FOR WORMS, or the same quack's ANODYNE NECKLACE FOR CHILDREN CUTTING TEETH, are crude blurbs without even the pretence of a pictorial design, while on the other hand the polished image of HYGEIA PREPARING VELNO'S VEGETABLE SYRUP anticipates the smirking virgins of Victorian allegory.

There are two trades, however, which were by their very nature linked with the wider interests of the period: the dealers in "natural and artificial curiosities" and the booksellers. Both often overlapped, and both issued tokens on an extensive scale.

The pieces circulated by the former exhibit a fascinating blend of showmanship with science and local lore. T. Hall, for example, THE FIRST ARTIST IN EUROPE FOR PRESERVING



26 The toucan token was issued by the same naturalist, T. Hall, whose White Negress appears on page 40.



BIRDS, BEASTS, &c., issued a number of tokens in 1795. But while one of them has three delightful illustrations of THE KANGAROO, THE ARMADILLO, and THE RHINOCEROS, the others depict Mrs. Newsham, the White Negress, and "Sir" Jeffery Dunstan, the Mayor of Garratt⁹, both of whom rivalled the stuffed birds, beasts, etc., as the chief attractions of Hall's travelling show, 11, 26. On another series of tokens, which advertise Pidcock's Exhibition of Birds and Beasts in Exeter Change, Strand, C. James, one of the best medallists in London, excelled himself in displaying all the most wondrous beasts that ever entered Noah's Ark—the Elephant and the Rhinoceros, the Eagle and the Orange Crested Cockatoo, the Zebra and the Antelope, the Toucan and the WANDAROW, the Ostrich and the Pelican, the Kangaroo and its young, born on September 10, 1800, not to mention the Two-headed Cow, the Lion fondling the Dog, and Louis XVI of France.

⁹ The mock mayoralty of Garratt originated with a successful campaign of a group of poor residents in Wandsworth against the encroachers of the Common. Dunstan, a deformed dwarf who lived by selling old wigs, was the second mayor. He is frequently depicted in political caricatures from 1780 onwards, and the design on the token was probably copied from one of these. Cf. Waters, op. cit.

The purveyors of "artificial" curiosities were not to be outdone by their rivals, the naturalists, if, indeed, they were distinct from them. P. Ratley of Duke's Court, St. Martin's, clearly belonged to both categories, for he was a dealer in DRAWINGS, PICTURES AND CURIOSITIES, SHELLS, ORES AND MINERALS. His token, 9, shows a connoisseur examining a painting and, on the reverse, a charming seascape with a ship in the background and a pile of shells on the foreshore. Both tastes were also catered for by many provincial establishments, notably Boulter's Exhibition of Natural and Artificial Curiosities at Yarmouth, which included the ethnological specimens collected by Captain Cook. The tokens issued by that institution in 1796 not inappropriately show Africa, Asia and America presenting their treasures to Britannia. Interesting, too, are the tokens depicting the Botanical Gardens at Bath (1794), 17, and the fine piece struck in 1800, with the porch of Lichfield Cathedral on the reverse, to commemorate Richard Greene, the Collector of the Lichfield Museum, who had died in 1793.

Most prominent in the "artificial" group, however, are the professional token designers and manufacturers themselves. Paltry, indeed, are Landseer's lions, if compared with the magnificent beast that appears on the pennies and halfpennies struck by the engraver C. James at No. 6 Martlett Court, Bow Street. But what is most significant for the vigorous and independent spirit of the age is that these small tradesmen did not hesitate to poke fun at the very collectors whose enthusiasm



We three—the two on the token and the third who looks at it and is prepared to incorporate it into his collection—Blockheads be. This farthing was issued by M. Denton, publisher of the book from which these engravings are taken.

lined their pockets. One of the tokens issued by Denton in 1796 shows a connoisseur examining a collection of coins spread out on a table before him, while an old man approaches from behind in order to place a fool's cap on his head; TOKEN COLLECTORS HALFPENNY—PAYABLE ON DEMAND is the ironical description, and the reverse is no less outspoken, for it shows two ASSES RUNNING FOR HALFPENNIES. A farthing token, also issued by Denton, shows two grinning heads facing each other and exclaiming WE THREE BLOCKHEADS BE, 27.¹⁰

Some of the booksellers' tokens appeal to tastes similar to those of the dealers in curiosities. But the majority are inseparable from the wider group of political tokens. Every phase in the development of the radical movement—its early growth under the stimulus of the American and French Revolutions, the reaction of 1791-3, the triumphant defeat of Pitt's sedition hunt by the London juries in 1794 and the subsequent spurt of British radicalism, until it collapsed in the outburst of patriotic fervour which followed Napoleon's rise to power in 1797—may be traced in this most interesting group. Two examples must suffice. The series of tokens relating to the Birmingham scientist and reformer Joseph Priestley reflect the close connection between radicalism and the industrial revolution. Priestley, the scientist, appears on a fine portrait token struck by Hancock in 1784, the reverse of which illustrates his experimental apparatus, while later pieces by the same artist acclaim him as a CITIZEN OF THE WORLD. The Birmingham riots of 1791, of which he was the victim, gave rise to two tokens, one of which attacks him as a snake in the grass and fomenter of sedition; but the other, which was again designed by Hancock and which was used as the reverse for some of Wilkinson's and Roe's tokens, shows him placing a fool's cap on the head of his main opponent "John Nott, the Buttonmaker."

The second example, and the most perfect illustration of the use of tokens for popular

¹⁰ Similar designs were frequent on inn signs of the period, and there is also a caricature of 1786 on which the two "loggerheads" represented are George III and the Duke of Richmond. The third block- or loggerhead is, of course, the spectator. Cf. M. D. George's notes to No. 6987 in B.M. Catalogue of Political and Personal Satires, Vol. VI (1938).

propaganda, is the series issued by that most single-minded of utopians, Thomas Spence.¹¹ In 1775 Spence, who was a schoolmaster in Newcastle, had published his glorious plan—partnership in land without private landlordism, which, as he firmly believed, would produce everlasting peace and happiness or in fact the millennium. He came to London towards the end of 1792, set up a bookstall and was promptly arrested for selling a copy of Paine's *Rights of Man*. After his fourth arrest in May, 1794, he was kept seven months in gaol without trial. He celebrated his release by issuing his first token. Its obverse bears his own portrait by James, while the reverse bears the legend: THOS. SPENCE SIR THOS. MORE THOS. PAINE—NOTED ADVOCATES FOR



End of Pain—a token issued by Spence and very frequently copied. The reverse has a picture of Pandora's breeches with the inscription: The Wrongs of Man, January 21, 1793.

THE RIGHTS OF MAN. Thus Spence was launched on his career as the most prolific issuer of political tokens in 1795-96.

Spence's genius for vivid, genuinely popular imagery is nowhere more strikingly displayed than in these tokens. Could anything be more delightful than the design of the two little boys playing with a turnstile through which Spence impressed the address of his own shop at 8, Little Turnstile, Holborn, on the public's mind? How charming, too, and how brilliant as a propaganda idea, is the symbol of the cat, a genuine London alley cat, which stares with big round eyes at the spectator, saying I AMONG SLAVES ENJOY MY FREEDOM. Its companion piece is the dog, eager yet cringing, with the caption MUCH GRATITUDE BRINGS SERVITUDE. And, of course, Burke's gift to the radicals, the famous swine trampling on the emblems of autocracy and superstition,¹² also appears on Spence's tokens.



Spence published a weekly called A Pennyworth of Pig's Meat. The pig is here seen trampling on the symbols of secular and clerical authority.

Most, if not all, of the Little Turnstile tokens were designed by James.¹³ To appreciate the progressive basis of his work, one should compare his fine classical portraits with the popular realism of his cat or dog, or his "True-hearted Sailor," and with such imaginative designs as that of the people dancing around the Tree of Liberty on which the head of Pitt is impaled (see also the token with the picture of Pitt hung, 15).

That Spence himself invented the themes of many of his tokens is proved by the fact that they are terse, slogan-like condensations of his own songs or dialogues published in his weekly paper *A Pennyworth of Pig's Meat* or as broadsides to popularize his plan. In one of his broadsides, for example, a fat missionary addresses some Red Indians: "God has enjoined you to be Christians. Pay Rent and Tithes and become Civilized People." But the noble savages reply: "If Rents we once consent to pay, Taxes on us you will lay And then our Freedom's passed away."

¹¹ On Spence (1750-1814), cf. Olive Rudkin: Thomas Spence and his Connections. London, 1927; on his tokens: A. W. Waters: The 18th Century Tokens of Middlesex, 1906, and the same author's "Trial of Thomas Spence," 1917. Before he issued tokens Spence had punched militant slogans advocating his plan on ordinary coins, e.g. FULL BELLIES—FAT BAIRNS—NO LANDLORDS.

¹² The relevant passage in the *Reflections* is: "Along with its natural protectors (i.e. the nobility and clergy) Learning will be cast into the mire, and trodden down under the hoofs of a Swinish Multitude."

¹³ Great confusion has been caused by the fact that Spence's dies were acquired after his bankruptcy towards the end of 1796 by Skidmore, who "muled" them indiscriminately with his own which were designed by Jacobs. Although many of these are violently anti-jacobin and have obviously nothing to do with Spence, they are still grouped with his tokens in the standard catalogues.

The corresponding token condenses the point of this story by depicting a single Red Indian who exclaims: "IF RENTS I ONCE CONSENT TO PAY, MY LIBERTY IS PASSED AWAY." In another broadside the free savages are contrasted with the Civilized Ass laden with rents and taxes. That unfortunate animal appears on a second token with four heavy panniers on its back exclaiming, "I WAS AN ASS TO BEAR THE FIRST PAIR."

Another of Spence's tokens illustrates Goldsmith's *Deserted Village* and quotes the passage ONE ONLY MASTER GRASPS THE WHOLE DOMAIN, 17. It is one of the very few tokens referring to enclosures and the only one to attack them. The only other allusions to enclosures and the scarcity of grain in 1795-96 occur on a series of tokens struck in commendation of the Duke of Beaufort and his tenants for reducing the price of their wheat to nine shillings a bushel. But one of the several dies used as the reverse of these tokens shows a beggar receiving alms, while another displays a plough with the caption SUCCESS TO THE CULTIVATION OF WASTE LANDS, 17.

That there are many parallels between the tokens and contemporary caricatures is not surprising. Although they are generally included in his series, it is unlikely that Spence commissioned the two tokens on which Jacobs has freely copied Gillray's famous contrast of *French Liberty* (a ragged Jacobin chewing an onion) with *English Slavery* (fat John Bull tucking into an enormous dish of roast beef), 13, 14.¹⁴ But Spence may have taken the design of his *British Liberty Displayed* from one of the many caricatures denouncing the press-gang, of which Gillray's print, published during the American war, is a striking example.¹⁵ That the caricatures of the time had a much longer lease of life than is generally the case to-day, is evident from the selections displayed in several illustrations of contemporary print shops, and it is not irrelevant that Spence sold prints, as well as books and coins, at his shop in Little Turnstile. Even more significant is the fact that Spence had been a close friend of Thomas Bewick until he left Newcastle at the age of 42.¹⁶

The caricaturists, in turn, did not hesitate to take ideas from the tokens. There can be no question that George Cruikshank's illustration of *The Free-born Englishman*, which that other past-master of popular propaganda, William Hone, included in his pamphlet *A Slap at Slop* of 1822, was literally copied from James's design on one of Spence's halfpennies. That design, incidentally, is another illustration of Spence's skill in the art of concentration. It shows a heavily shackled man whose lips are sealed with a large padlock. Since that point would have been lost, had the original been reduced in scale, Spence contented himself merely with a large padlock and the word MUM on the corresponding farthing token.

The renewed issue of regal copper coins in 1797 and the following years deprived the tokens of their main function, and very few were issued after 1797-98. How rapidly the combination of intellectual vigour, social consciousness and imaginative design, which makes the eighteenth century copper tokens so significant, was lost, is shown with startling effect by the private silver tokens which were issued in 1811-12. With few exceptions they are poorly designed and lack anything that might distract from their uninspiring function as truck tickets or advertisements.

¹⁴ Published December 21, 1792; Jacobs's copies are undated.

¹⁵ *The Liberty of the Subject*, October 15, 1779.

¹⁶ Bewick pays high tribute to Spence in his *Memoir*; there may also have been a direct link between Bewick and James, for the former illustrated a catalogue for Pidecock's Exhibition about the same time as the latter designed his animal tokens. Cf. Rudkin, op. cit., and Waters, op. cit.



Between the eye and the

... books, wine, cheese, globes, mathematical instruments, turkeys, telescopes, hams, tongues, microscopes, quadrants, sextants, fiddles, flutes, tea, sugar, electrical machines, figs, spices, air-pumps, soda-water, chemical apparatus, eggs, French horns, drawing books, palettes, oils and colours, bottled ale and porter, scenery for a private theatre, pickles and fish sauce, patent lamps and chandeliers, barrels of oysters, sofas, chairs, tables, carpets, beds, looking-glasses, pictures, fruits and confections, nuts, oranges, lemons, packages of salt-salmon, and jars of Portugal grapes.

Headlong Hall, by T. L. Peacock.

to the Sale



It is difficult not to follow the pointing hand in these notices in bold type, which one finds hung on hawthorn bushes or nailed to gate-posts, round about Michaelmas and Lady Day, up and down the country. Apart from the normal reactions of a treasure hunt, and of being given a lawful opportunity of coveting one's neighbour's goods, there is a more subtle inducement, the hope that one may find oneself in a looking-glass country, and able to explore the infinite possibilities of topsy-turvydom. One is so used to seeing furniture inside a house, that it is a shock, here at a sale, to see a house stripped from top to bottom, and the furniture arranged with care outside. The mind, a creature of habit, expects beds to be in bedrooms, dining tables in dining rooms, and the chandelier with glass pendants to hang from a stucco ceiling ornament, but here the beds stand in an ordered row in the vegetable garden, the Great Brass, the cast-iron and the fumed oak; the dining table is in the middle of the croquet lawn, and the chandelier hangs from the branch of an apple tree. Even in the confusion there is an unfamiliar order. The long parallel rows of numbered lots increase the initial surprise as the strange regrouping of already disassociated objects compels attention—the hip bath full of tattered magazines and the Works of Fenimore Cooper on top of the mahogany chest of drawers; the nursery fire-guard, now protecting unwary children from a broken lamp, a pair of rubber boots, some



the house

By Kenneth Rowntree

miscellaneous gardening tools and the unknown dangers of the trampled herbaceous border beyond; the plaster busts of kings and politicians lowered from library shelving to gravel walks; the increased fragility of Dresden china in a lot consisting of an iron figure of a Highlander and two nineteenth-century bronze Vestals on a marble column. It is exciting to see so many different styles of furniture and design cheek by jowl, an opportunity too infrequently met with. Look at the large mahogany sideboard with the black marble top, redolent of the Great Exhibition, its panels carved in a rich relief of game and ivy, framing innumerable mirrors, and next to it the kitchen dresser and delft rack, its drawers with china knobs. And look at the two chests of drawers over by the laurel hedge, one with the bow front and lion-headed handles, and the other, from the maids' bedroom in the attics, grained by the local carpenter and splodged with candle-grease. Look at Lot No. 362, the American wall-clock, the Empire Eight-day in ormolu under its dome of glass, and the Office Dial, made in the City Road, with the large roman numerals, lying on its back in the grass. One could go on finding examples of these unexpected and edifying relationships until the notices are taken down, and the last chiffonier has been loaded into the van at dusk.

Naturally it is not only at sales and Auction Rooms that this disassociation and regrouping of objects takes place, but it is in such places that it is most obvious. The unnatural phenomena of bombed houses, the stranded furniture, the pictures on the wall; the re-emergence of pony traps and diligences in the petrol era, the use of archaic brass and iron bedsteads to reinforce concrete in local defence works; the remarkable cross-sections visible in the haphazard interior furnishings of vestries, all induce a similar sensation. Then there are the lists of all sorts, the railway guides, the gazetteers, provincial newspapers, parish

magazines, etc.; all have in a lesser degree this power to make one see familiar objects in a new and enhanced way. Squire Headlong's list of commodities which he thought necessary for the entertainment of a house-party of philosophers, professors, critics, a Divine, and a landscape-gardener is a masterpiece of this nature. A French horn takes on quite a new aspect when tucked away in the mind together with air-pumps and fish sauce.

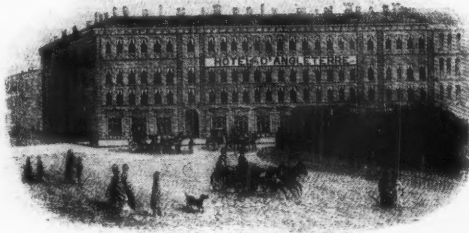
This power to disassociate objects from their surroundings is invaluable to the painter. It enables him to see the object isolated and to analyse the numerous extraneous influences the better when he comes to reinterpret the object in reality. It is like a combination of the dissecting board and the microscope to the scientist, and insures that the object is seen with a fresh and unfettered eye. It is, perhaps, most important to the topographer and the painter of architecture. For here, though the scope and variety of objects (buildings) is immense, and the objects already in sharp contrast to their surroundings, it is more than ever necessary to be able to isolate them in order to judge the effect of outside influences upon them, which play such an important role in trapping that elusive quality, the personality of a building which the painter must catch and transmit. It is not just a question of architectural style. Being chiefly concerned with colour and form, balance and dimensional rhythms, his selective eye can range over the whole gamut of styles for his ingredients irrespective of fashion and taste. He will have his preferences; but a style will not be a closed compartment to be shunned, even if it does not harbour the particular qualities for which he searches at a given moment of his development. Neither is the personality of a building always determined by its materials, though these are a useful guide. Marked individualities help, but sometimes the painter must delve deeper to discover

that the personality of his object is determined by something which has little to do with the technics of architecture. The site plays a considerable part. The successive generations of owners' tastes will often create a triumphantly heterogeneous galaxy of incongruities in the garden and neighbourhood of a house—the several sorts of fencing and gateways, from wood to cast-iron; the straight paths and the sinuous walks through shrubberies; the disused or altered carriage-drives; the deserted tennis-court in its cage of wire-netting. Even the dulllest house has at one time been endowed with interest by the operations of this multiple genius. Then there are the objects which are nowhere near the painter's building, but which may project a sensation over it, even when it will not be included visually in his work. Among these are other houses with a more pronounced character; the influence of large pine woods or mountains, contiguous to the perhaps agricultural or plain-like country in which his building lies; the vicinity of railway stations, levels, and embankments; neighbouring industrial buildings, of whose influence a good example is the trim house (c. 1880) built by the founder of, say, a brewery, which has been dwarfed by the subsequent expansion of the surrounding malting houses, so that it is become a doll's house. Monasteries, churches, castles, antiquities, canals, markets, even decayed industries (the woollen trade in East Anglia, the tin mines of Cornwall, the abandoned iron workings on the Yorkshire moors, etc.) which have or had specialized functions, all have an influence on their neighbourhood, which the painter may find it necessary to suggest. It may sometimes predominate the complex influences which go to make up his portrait of a house. The occupiers of a house, whether past or present, often add something indefinable to the painter's synthesis. The knowledge that Francis Quarles, P. B. Shelley, or Sir Joseph Paxton (to choose at

random) "lived here" and whether or not they made any physical alterations is bound to endow the house with a train of associations often strong enough to find their way into a painting.

It is instructive, when pondering on these influences, to consider the lives and works of some of the early English water colourists. At its inception the art was almost entirely occupied with architecture, and many of the painters, now famous as pioneers, began work as the embellishers of architectural elevations attached to architects' offices. Later increased freedom came with the growing demand for illustrated county guides, essays on local antiquities, and the sumptuous treatises in full colour on The Seats of the Nobility and Gentry. In these one can recapture some of the enthusiasm with which these subjects were tackled, and see how their painters' early training, the experience and dexterity flower before the actual scenes and buildings. Even the engravings very often carried out by another hand cannot suppress the clarity and vigour. With what pride the phrase "Drawn from Nature by . . ." appears at the bottom of the sheet. The paintings and prints had a wide circulation, and must have had an incalculable influence on the architectural conscience of their day. They are still fresh to-day when contemporary vision is so much influenced by the speed and unselective eye of the camera. They give a much wider impression of a house, and it is no difficulty for the imagination to suggest that here is a house in action—almost a working model. One expects things to happen, figures to appear on the winding path by the lake, gardeners to be busy behind the shrubberies, and looking further (as one always can) we might discover, like Peacock's Mr. Milestone, an owl peeping from the ivy or even Lord Littlebrain in an elegant boat. One of the strange things noticeable in these paintings is that although nearly all the painters were imbued with a strong feeling for the romantic aspect of antiquities (a contemporary fervour), they were quick to appreciate the quality of newness in

To trace the history and development, decline, and re-emergence of painters of architecture is a treasure hunt which becomes an obscure delving among the less well known and often forgotten painters. The portraits of houses become more difficult to find. It was the change in the public need and taste (and the arrival of the camera) which dealt a blow at the topographer, but the fascination of the house still remained for the painter and continued to show a fitful light in a humbler sphere, as in the engravings in the gazetteers of hotels at home and abroad, and in the



The Hotel d'Angleterre in St. Petersburg. From the 1875 edition of Murray's Handbook.

illustrated journals, where it appeared as a background to subjects more in vogue, the conversation piece, or the recording of public events. But how splendid some of these anonymous engravings are; the official opening of tunnels, suspension bridges, railway stations, exhibitions, the decoration of towns to receive royalty, the interiors of theatres, beautiful in themselves, but only included because of an explosion or a disastrous fire which had lately occurred.

To-day there seems to be a considerable revival of interest in the painters' approach to architecture, which has been stimulated by some recent exhibitions, especially those of work done under the Pilgrim Trust's Recording Britain scheme. This new interest is perhaps an offshoot of the general awakening interest in architecture as the all-important question of post-war planning looms ahead. One cannot write of contemporary architectural painting without mentioning John Piper whose pictures have opened up new worlds of contemplation and illumined the dark places of architecture for so many people.

It is perhaps possible at this stage to try to assess the painter's contribution to architecture. One cannot generalize about painter's likes and dislikes, as each painter's work is a different voyage of discovery, but there are common denominators. Painters are, either by intent or subconsciously, propagandists, and stress the things which interest them most deeply in their subjects. Their visual life is one of constant comparison of related and juxtaposed objects, which enables them to observe colour relationships, to fix dimensions, and to analyse the play of pattern and integral rhythmic combinations. They are specialists in co-ordinating relationships. For the painter of architecture, houses and groups of houses present a rich field of research. It is impossible to give a complete list, but some of the innumerable relationships which he may use can be suggested. There is the contrast between houses of different styles; between a house and its surroundings; between a house and its sensations; there are the anachronisms of a house built out of its period; there are all the local variations of a known style; courageous borrowings from other styles; there are the contrasts of use and disuse, the being lived in and

the ruinous antiquity; the contrast of the temporary and the permanent, to be seen with great effect at watering-places (the wood and stucco Casinos and Alhambras, the pleasure-ground porticoes, standing next to Town Halls and Mechanics' Institutes in granite). And then there are the triumphal eccentricities, the follies, the grottoes, the ruins, which have an immediate and direct appeal, designed as they are for the eye only: the contrast is one of utility versus fantasy, usually to the heightening of both qualities. Some one quality can as a rule be found predominating the work of individual painters; one expects gloomy immensities in the work of James Pryde, and a strange mystic engineering in Victor Hugo's paintings of castles and lighthouses.

Many of the contrasts just enumerated have obviously nothing to do with architectural style. Some of the most moving relationships can be found where the house is, as it were, merely an accent, a finishing touch to a landscape, which would, however, be meaningless without it. An ugly house can be redeemed and made beautiful by being the keystone of a planned composition. Its disproportions and its dullness, its "too-longness" or its "too-highness" may be vital and necessary opposites to the character of its site. Unprejudiced and unprompted by the manual of architectural style, the painter can realize the changes which take place in the appearance of the "ugly" house—how from different viewpoints and in different lights it will take on beauty and defy its detractors, how it will reveal unexpected felicitous relationships with its surroundings, a surprisingly delicate silhouette at evening. So, too, in the matter of colour. That familiar colloquialism "the glaring red-brick horror" glares to some purpose and often magnificently from the depths of green dark woods. The qualities of colour and pattern in the ugly house, even though the colour is satisfying only as a complementary to that of its surroundings, and the pattern of the house only a passage in the rhythmic relationship which perhaps began in the objects adjacent to it, can give a new aspect, a true portrait of the house, though achieved not primarily through a representation of its architectural ingredients. Similarly "ugly" groups of houses, "ugly" towns and cities may give up some positive qualities, and be heralds of a new aesthetic order.

In this way the painter by being selective, and by being aware of the accidents of time, place and chance, can give in his work a new view of the house, one irrespective of its true architectural value. Such paintings, the work of an independent outside observer, can widen the field both of appreciation and research. The painter's delvings into the visual aspects of past and present architecture, including the good things and those which are dubbed "bad," and his reinterpretation and refocusing of them can stimulate the public eye and inculcate an increased and much more critical awareness of the contemporary face of towns, villages, streets, and houses. New researches are all the time being made from an inexhaustible repository.

Though at first sight there is little connection between the topographical painting hanging on the wall, and the scientific disposition of the landscape-gardener's ornament ("placed within sight of some window in the common sitting-parlour"), Gilbert White's observation on the utility of obelisks can be fittingly borrowed to sum up one of the main attributes of the work of the painter of architecture; "a pleasing eye-trap might also contribute to promote science."



Gosfield Place in Essex, engraved by J. Barnet from a drawing by Humphry Repton, and published in 1819 in the *Excursions in the County of Essex*.

the houses, the glaring white stone, and stucco, the unweathered rustication, the precise lines. Here an echo of their former employment is visible; the houses seem so new sometimes as to be almost the actual elevation, hot from the architect's desk, standing out triumphantly from a realistic background. The resulting pleasant incongruity is often extremely decorative. One feels that the once close co-operation of painter and architect was of benefit to both, leading to a much more thorough understanding of buildings by the painter, and to a fuller realization of the possibilities of the site in the architect.



2



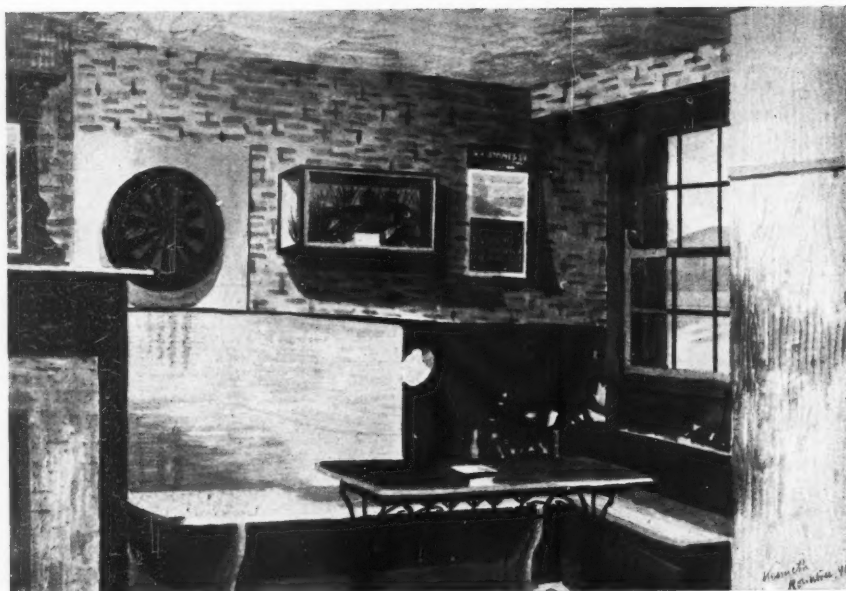
3

Supposing an architect and a painter both look at the Buxton Crescent, 1. They see the same building, and yet it is not the same. An architect, and even more an architectural draughtsman, concentrates on three-dimensionality. He sees the sweep of the building, its symmetry, the proportions of arcade to upper stories, arch to giant order, the weight of architrave and balustrade on the order, and perhaps also the harmony or lack of harmony between the building and objects in its neighbourhood. The painter, in our pictures 1 to 6, it is Kenneth Rowntree, sees the building as a pattern, or rather as part of a pattern. He translates its three-dimensionality into terms of two dimensions, its architectural into pictorial, or as Uvedale Price said, picturesque values. The one dark chimney stack over the corner and the gothicizing clock tower in the background on the right fall into the same surface rhythm. The trees also, confusing as they would appear, if the painter aimed at a strictly architectural statement, become a necessary counter-weight to the corner of the building. Sandbags are as legitimate and interesting a motif as rustication and fluted columns. The variety of surfaces in their colours, tones and their manifold subdivisions becomes a source of joy. The shelter in the right-hand bottom corner would have been left out of the picture as an eye-sore by any architectural draughtsman. Kenneth Rowntree endows it, and the trees overshadowing it, with the same interest as the corner of the Crescent itself. What he does for the shelter and the sandbags in 1, he does in 2 for the Wesleyan Chapel of 1840. He discovers its toyhouse formality, the qualities of the ochred window heads and door surround, the dappled reflections in the hammered glass, and the slates reflecting the pale sky. He can see all this, because he is unencumbered by the criteria which make it impossible for most architects and most people of taste to take the observing of building or scenery as a purely visual adventure. What criteria are they? What prevents us from seeing for seeing's sake? We keep asking about date, style, architect-designed or not, of good craftsmanship or not, correct or not, etc. The painter can, whenever he wants, forget all such extraneous matter. The street wall is particularly illuminating. Most of us would call it a

monstrous little affair, not worth one look. Not so the painter. He sees that to a certain scene it can give character, and he describes what that character is. So potent is his vision that we are forced to admit the peculiar attraction and appositeness of the beastly thing. Such unwilling admissions provide the steps by which we climb to real visual sensibility. Now 3 shows a building of exactly the same plan and intention as 2, but a building of as high an aesthetic quality as the Buxton Crescent. It is, however, a building in the vernacular, that is not formal as the Crescent, not symmetrical, not drawing-board designed: a perfectly straightforward job of work done with an easy mastery that makes the modern architect look a fumbler. The roof is realized as a roof, not merely as a cover, the windows are powerful natural features in a wall of whose solidity you are given a tactful reminder in the sloping door and window reveals, and the doorway is like a wide-open mouth ready to suck you in. The chapel is in fact so good a work of art that you may think the painter could hardly add values to it of his own. Yet he does—in the most unexpected way. He contrasts the chapel with, and relates it to, a curious patch of rockery-fernery in the foreground. This is, of course, a Victorian feature, and to the correct mind the last thing that should turn up here. The architectural draughtsman would elaborately overlook it. But the artist has cut straight through these false conventions, and proved that a rockery, or rather this particular rockery, makes a perfect foil for the old building. Once more his taste is more reliable than that of the man of taste, the dilettante, the antiquarian, the archaeologist. In 4, an interesting discrepancy is patent between accepted architectural and picturesque values in a room. This Council Chamber at Bangor used to be the Bishop's Audience Chamber. It was for that purpose decorated in the late eighteenth century in a genteel provincial Adam style, not without charm. If you look at the room as a piece of period decoration, the pictures of the past mayors and the comparatively recent furnishings jar. So don't look in that way, or else you will deprive yourself of an additional source of pleasure. Looking at it with the painter's eyes, you will all of a sudden see the



4



5

superimposed new pattern of black and white concentric rectangles, rhythmically repeated, and of ponderous dark chairs and tables—an amusing and instructive contrast to the light stuccoed ceiling. The artist must have felt that, or he would not have repeated the same contrast of light and dark, and light and heavy, in the very centre of his picture; delicate white glazing bars versus heavy blackout curtains. The Public Bar at Ashopton, on the other hand, 5, is overwhelmingly of a piece. Here—as we are in a vernacular idiom for a vernacular purpose—the painter needed only a little additional emphasis on what we all feel to make us see it and understand our own affection for it. He had not got to defeat prejudices—or at least only the prejudices of hopeless formalists—nor to fight the prevalence of outside criteria. He had just to state what there was, to succeed in blending joy in the pictures with joy in the objects. How snugly close all these objects live together. How convincing is the dark circle on the light square—dartboard on ply-board—how well do the two shapes go as a two-dimensional pattern with the precise three-dimensionality of the glass case with the fish and the bits of weed inside. And again, how convincingly is the shape of the case repeated, in the calendar on the right, but now upright, not horizontal, flat and not projected, subdivided and not as a whole. Then the trellis of the iron-legged table, and the exquisite prop on the right—a deal blackout partition—starting merrily the jostle of forms which we follow round the corner of the built-in bench towards the fireplace on the left: planes alternating, meeting, attracting and repelling each other, in an ever-changing rhythm. In 6, the objects also jostle, but the rhythm is characteristically different, and so is the weight of each individual object. Most people of taste are used to looking at monuments and furnishings in churches as so many objets d'art. If they are all part of one scheme as in Wren's City churches, so much the better. If they are not, their accordance with the predominant style of the church and their individual aesthetic values usually decide, whether we accept them or disregard them. The painter on the other hand is tempted by the very complexity and apparent incongruity of the pews, monuments and commandment boards. He explored this corner of a village church with great gusto, diving under the low gallery supported on the wooden column with its painted marbling. And he found an ensemble of a density, unforgettable in his rendering in paint, warm and weighty, and of a delightful naïveté. The gallery and the commandment board cut picturesquely into the windows and the bench cuts into the board with the verse from the Bible. No purist, no antiquarian, and very few architects could enjoy that without the guidance of the painter.

The six pictures are illustrated by the courtesy of the Pilgrim Trust Recording Britain Scheme. 1 represents the Buxton Crescent; 2 the Methodist Chapel at Ashopton, Derbyshire; 3 a chapel at Llanrwst, Wales; 4 the Council Chamber in Bangor; 5 the village inn of Ashopton, Derbyshire; 6 the parish church at Whitby, Yorkshire.



6

FLORILEGIUM

Thus mediaeval authors called a tome, chiefly composed of quotations; an anthology, a *catena*, a *garner*, a *thesaurus*. The term seems appropriate to indicate the intention of the following article and of similar articles to be published every now and then. Such Florilegia should prove equally illuminating whether dealing with individual books, or with problems of topical significance as treated by different writers or different generations.

A Harris Florilegium By Peter F. R. Donner

MR. HARBRON'S article on Thomas Harris in the September issue of THE ARCHITECTURAL REVIEW must have come as a revelation to many. It contained enough samples from his few writings to whet the appetite of the duller reader, and enough samples from his work to force home the contrast between a progressive Victorian's theory and performance.

Harris, if anybody, must be called a Victorian, for his first book, written in 1860, had the astonishing title *Victorian Architecture*. Now we find in Murray that no instance is known prior to 1875 of the use of the term Victorian in the sense of "belonging to the age of Queen Victoria." So the title of the book was both bold and revealing a keen historical sense. It seems unique, except for the name of a rare monthly, of which only one volume came out. *Examples of the Architecture of the Victorian Age*, London, Darton and Hodge, 1862. A copy of this volume was recently discovered at Batsford's, who kindly presented it to THE ARCHITECTURAL REVIEW. Its editor is unknown. But if the title is taken into consideration, and the facts that Thomas Harris wrote two articles in it, and that two of his houses—the earliest so far known—are described and illustrated, it appears highly probable that he was on the editorial staff, if not the editor. Harris's only other publication dates from 1894, the *Three Periods of English Architecture*. So his early writings are separated from the *Three Periods* by more than thirty years. It will therefore be advisable to arrange the following quotations in two groups: 1860-62 and 1894.

Victorian Architecture is really nothing more than a very short pamphlet. Its most important feature remains its title with its sensibility to life in a new age, and the duties its character imposes upon the architect. "This is an age of new creations," Harris exclaims, "steam power and electric communication (are) entirely new revolutionizing influences. So must it be in Architecture. . . . We must no longer grope about amongst the usages of former ages, but . . . chisel out for ourselves new expressions, being content with simple, and, it may be, rude achievements at the outset." This sounds extremely promising. Harris has no grievance against period styles: "The works of past ages, whether Egyptian, Greek, Roman, Italian, or Gothic, must and ever will claim the admiration and respect of every thoughtful mind, in so far as they express their nationality; but a reproduction of any of these in this age (advanced as it certainly is in civilisation and scientific knowledge) . . . will not suffice; no remodelling or adapting will do, but . . . an indigenous style of our own." Harris does not deny that "the Architecture of all past ages must be thoughtfully studied . . . to educate the mind and gain the spirit and principles of application, but not," he adds, "for mere unfeeling stereotype copying." For this copying he blames the works of his fellow architects: "nothing more than substantial skeletons, dressed up and disfigured by flimsy shams," while he blames the public of his day for their "love for richness and . . . rage for cheapness, meretricious ornamentation, and expedition at any SACRIFICE." Against these vices he raises his voice and preaches Pugin's and Ruskin's gospel: "All art, to be good and lasting, must be truthful." On both, Pugin and Ruskin, long articles appeared in the *Examples*. And where he goes more into detail, as to how truthfulness is expressed in architecture, he also hardly more than repeats what others had said before him: "The fundamental principles, or key to the

development of true art in architecture will be found to lie in an intimate acquaintance with the true natural characters of the materials at command, and their strict application to the requirements and wants of the time." Direct expression of materials and function had been demanded by Pugin, and again in 1851 by Semper and Owen Jones (whose writings call for future *Florilegia*).

It is at this stage that Harris the author overtakes Harris the architect. In theory he is quite able to indicate the case for functionalism; "Every feature" should be "designed for its purpose and position," "the anatomy" of a structure "being exhibited." This, and his flourish on steam-power and electricity, sounds like advocating the most daring American mid-nineteenth century iron and glass fronts (as recently re-discovered by Dr. Giedion). But Harris at once adds that "a perfectly poetical harmony" should be achieved. Now poetical harmony does not seem the wording one would choose to characterise St. Louis warehouses. And what Harris means by the poetry of a building comes out in the following "great rule to be observed": "Keep all projections or variations of outline and surface as bold and imposing as possible." The shops in 155, New Bond Street and 26, South Audley Street show how this advice is meant. They are described in the *Examples* as "bold and . . . original," and bold we should still be inclined to call them to-day, as a look at their façades, illustrated on the following page, will confirm. "The style is," the *Examples* go on, "what Mr. Harris calls 'THE STONE ORDER OF VICTORIAN ARCHITECTURE.' The character is novel; there is great freedom of expression . . . ; it is attractive without being gaudy, and is chaste and imposing to the eye, whilst the requirements of trade have been so far consulted that every inch of space has been turned to the best practical purpose. Many of our merchants will, no doubt, be ready enough to invest their capital in this way." (Does the thirty years old editor-cum-architect here try to kill two birds with one stone?) 26, South Audley Street, in particular, is certainly not lacking in "variation of surface." It also followed Harris's more detailed recommendations as to constructional coloration: The groundwork, he says, can be yellow, but reveals should be white for light's sake, and relieving arches red to show strength. Brick must never be cement-covered. This, of course, is one of the implications of architectural truthfulness. It corresponds to the rules that "one material should never be painted to represent another," and that "the treatment of stone" must "be distinct from that of brick, brick from that of wood, wood from that of iron."

Now as for iron, Harris had in 1860 not yet discovered its potentialities. He does not go beyond saying that wrought iron should exhibit its natural character, "brick, cast-iron, plastic materials and the like, their manufactured character." He had used iron girders above his shop windows in the two shops illustrated, but there was nothing new in that. Ruskin, in fact, had been far more clear-sighted, when in *The Seven Lamps*, that is as early as 1849, he wrote: "The time is probably near when a new system of architectural laws will be developed, adapted entirely to metallic construction" (*The Lamp of Truth*, § 9).

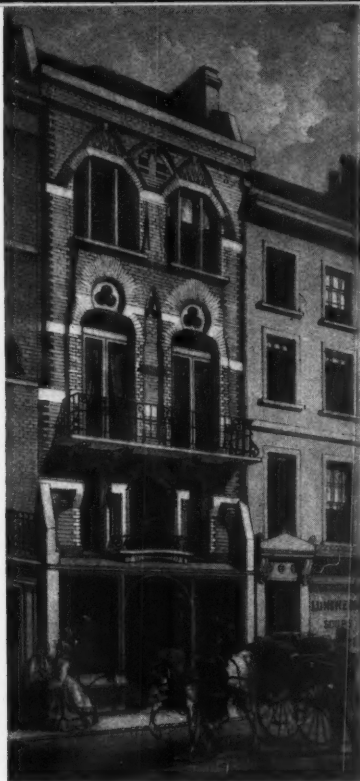
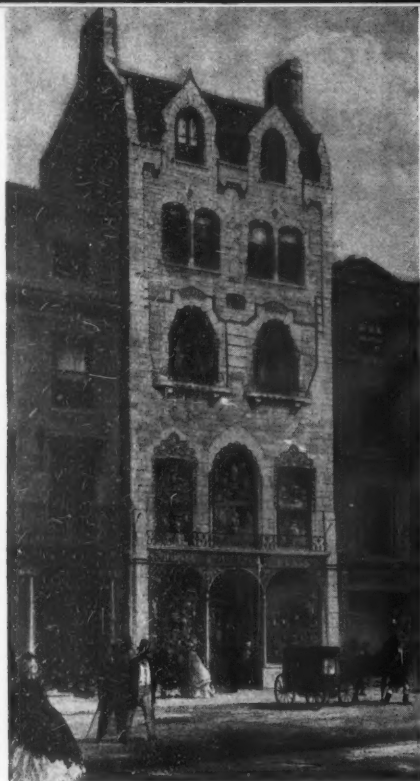
It is, this must be admitted, different in the *Three Periods*. Mr. Harbron has quoted in full the passage hailing the Crystal Palace as "a new departure in building." But between 1860 and

1894 a good many things had happened, and while a true appreciation of iron was still rare enough, it is not as amazing as it would be thirty years earlier. This lends all the more interest to a curious article in the *Examples* of 1862. It is called *Thoughts on the Future of Architecture* and signed Δ . I have no suggestion to make as to Δ 's identity. He was familiar with Harris's trends of thought. He talks of "the Victorian style, as it is already named." He denies, as Harris does, that "this or that style of art, having once budded, flowered, and withered away, can relive its former life; it may be reproduced, imitated, rehabilitated, but the spirit of it is wanting, for it in no way represents the great artistic tendencies of the age." But what were they in 1862? Here, Δ gives an astonishing answer: "One of the great requirements of the day is to cover large areas, at the most moderate cost, and probably for a temporary purpose only. This problem has been satisfactorily solved in the numerous magnificent railway stations of Europe, amongst which that of Munich, for originality of design, beauty of proportion and decoration, stands, we think, pre-eminent. The applicability of this principle, combined with the plan of a conservatory, led, some ten years since, to the design of our own Crystal Palace, where a new style of architecture, as remarkable as any of its predecessors, may be considered to have been inaugurated. We consider that iron and glass in conjunction have succeeded in giving a distinct and marked character to the future practice of architecture."

This faith in iron may look like Ruskin's. But Ruskin hated it while foreseeing its future; and he certainly hated the Crystal Palace. Δ is about the first to see and say what it stood for. Was he Harris? If not, he must have impressed Harris considerably. In the contribution to the *Examples* which he signed with his name and called *What is Architecture?* he refers to the St. James's Hall in Piccadilly (a large and sumptuous place of entertainment, designed in 1858 by Owen Jones in the Egyptian style) as follows: "The iron roof (while in course of erection) exhibited a beautiful combination of arched ribs and bold outlines, and with proper artistic treatment could have been made a marvel of real effect," instead of which "a sham covering of the most flimsy kind" was put in.

However, here we are up against the same snag. What is the "proper artistic treatment"? What "the want of high art" for which he blames the architecture of his day, in spite of "ingenious construction" and "new inventions and appliances"? Harris never disentangled himself from this dilemma. Nor did, in point of fact, any English architect of his age. Several saw as clearly as he that a new style was imperative, a very few even felt that iron and glass might be its materials, but none built as he felt. Harris's houses are striking examples of this Victorian contrast between theory and performance. So are the works of Viollet-le-Duc and George Aitchison, whom, amongst many others, Harris in the *Three Periods* quotes in great detail to strengthen his own position. At least thirty per cent. of the text of the book consists of quotations, another proof how far Harris's mind was from the true revolutionary's. Yet the book is full of stimulating matter, much maturer and much more knowledgeable than *Victorian Architecture*.

For one thing it has a historical substructure. Gothic is recognized as the indigenous style of England; its principles are still active in Elizabethan architecture. Only after 1600 it "was abandoned, and then came the deluge" (p. 15), that is "the alien style" (p. 3), the Italian Renaissance. Since then the English "have been doomed to grope about among a chaos of styles" (p. 3). This state of affairs went on "for some 250 years," until the Gothic Revival brought the healthy return to England's own tradition, as it was just before foreign forms had begun to obscure its character. Harris is at one with the Gothicists of his age in believing "that (a new departure) must be founded on the last phase of Gothic," but he adds at once that it must be "by the use of essentially new materials that the path will be opened for it" (p. 55). Now Harris proves



Thomas Harris :
155, New Bond St.
(left) and 26, South
Audley Street (right),
both illustrated in
Examples of the
Architecture of the
Victorian Age, 1862.
The style of the two
houses appears curi-
ously contradictory
to Harris's bold theo-
ries, although de-
tails such as the
treatment of brick
are what Harris
wrote they should be.
It is useful to know
in reading Harris's
plea for novelty and
freedom from period
bonds that this is
what he was aiming
at.

an exceptionally deep insight into the real principles of Gothic architecture in the way in which he pleads for its adaptability to nineteenth century needs. He considers it quite possible that "the Gothic revivalists have . . . instead of, as they supposed, reviving mediæval architecture for modern use, unconsciously initiated a forward movement." For to him the principles of Gothic construction and of iron construction are all but identical. He is clear-sighted enough to refute at once the counter-argument that iron cannot be of Gothic character, because Gothic was an "arcuated" style, and iron calls for a "trabeated" one. He points out that the arch belongs to stone, the trabeation or straight lintel to wood and iron, and that Gothic architects never used arcuated forms in half-timbered construction (pp. 136-137). In thus illustrating the priority of principle over form, Harris is especially felicitous and pertinent. Having once overcome this objection, he goes on with glee: "I can almost imagine with what enthusiasm the architects of the fifteenth century, after they had exhausted themselves in some supreme effort, would have received the announcement that metal was available for further aiding them in their restless endeavour to give form to floating visions" (p. 147). For they had reached a point about 1500 "at which architecture . . . was premature, the architects of the time having outrun science in their haste to unfold the possibilities of their art. . . . Or, to put it another way, science had not been developed so rapidly as it ought to have been, and hence the (new) material was not forthcoming when required" (p. 148). The difference between then and now is to Harris simply that "the mediæval builders did not know iron as a constructive material; and if they had known it, they had no means of procuring it in anything like sufficient quantities. We have it and can produce it in any quantity. We are living in an age of iron" (p. 120).

But now, if ours is an age of iron—or even of aluminium, as an especially bold passage on p. 113 seems to promise*—what should our buildings actually look like? And there the Harris of 1894 stops short, as the Harris of 1862 had done. He cannot force himself to ask for buildings of a Crystal Palace appearance. He cautiously says that the "new material would probably be for some time purely constructive. . . . The decorative forms would be those known to us. . . . First the body, then the soul to inhabit it (a very doubtful statement!); the body being a mechanical structure, can be reasoned about and contrived; but the soul must come we know not whence. . . .

*Aluminium had been invented by Wöhler in 1827 and put to practical uses from 1854 onwards. Harris mentions the exterior of a house of sixteen storeys at Chicago as entirely of aluminium. Is this correct?

We can invent a new construction, and the new style will grow out of it" (p. 131). But this is downright defeatism. No wonder that Harris explicitly permits "national buildings, governmental, civic, etc." to be in "the traditional style from which our civilisation gradually emerged" (p. 150). It is pathetic. When it comes to actual innovations of appearance, he goes hardly beyond advocating a freer use of exterior coloration by means of marbles, granites, mosaic, faience, etc. (p. 80, *seqq.*); and this was not new. The history of the battle for colour in modern architecture, from 1833, when Semper proved that the Greeks had used much colour externally, and thereby gave coloration an uplift amongst nineteenth century architects, *via* English Semper translations, Owen Jones, Burges and Butterfield, to Halsey Ricardo and on to *The Daily Express* would be a study on its own. In fact Harris explicitly states that "we could defy smoke with such a defensive armour as vitreous materials would afford" (p. 83). But he probably thought of terracotta decorated with North Italian renaissance motifs, and not of glass sheeting. For, following in the footsteps of T. G. Jackson's *Modern Gothic Architecture* of 1873, he recommends, as soon as it comes to decoration, "infusing into Gothic form the spirit of the Italian" (p. 24). He believes in this kind of "coalition architecture" (p. 148)—a good word for what followed the subsiding of the battle of the styles—and he argues that "the existence of Italian Gothic is a sufficient answer" to the objection "that two such apparently antagonistic styles could not be successfully amalgamated" (p. 61). So here is the real reason for the success of Ruskin's plea for Venetian Gothic and the real sense of that curious Venetian episode of 1855-1875 in English architecture.

So if he demands that, while "one hand should be stretched out to Italian Gothic, the other hand must, with equal sympathy, grasp that of modern science" (p. 153), we are no longer quite so credulous as to Harris's notion of the actual result of the desired alliance. For the truth of the matter is: he did not like the sight of steel exposed. He admits that dreadnoughts "now that we have become accustomed to them, . . . do not appear so ugly." But he is far from the enthusiastic welcome of the æsthetic delights of engineering forms which, according to Mr. Pevsner's *Pioneers* first appears in Henri Van de Velde's essays of 1894 *seqq.* Perhaps Van de Velde was not quite so alone and daring, as he appeared to Mr. Pevsner, for Harris quotes Beresford Pite, saying in 1893: "The genuine and characteristic architecture of our age is to be found in the works of engineers, mill and factory builders, and gin palace fitters. . . . Has not the Forth Bridge a piquant power of force, and a real, if not ideal,

beauty, without the assistance of what you and I call architecture?" (p. 163), and W. M. Conway, writing in the *Pall Mall Gazette* of 1894: "The Eiffel Tower, built wholly of metal, is an example, and a good example, of a step in the direction which architects will be driven to follow in future. The great railway stations, exhibition buildings, and other structures of steel, concrete, paper and glass, which needs and inventions of our day will call into existence, show which way flows the stream of tendency. The new building material has come to stay. In another century houses may not merely be built with steel girders, they may be made of metal frames, bolted together and gripping walls of papier-mâché" (p. 141).

Now Harris, this seems to result from his own later buildings and his *Three Periods*, would not have had any enthusiasm for Le Corbusier. Yet we cannot help being moved with sympathy and admiration, while we read of his vision of architecture in the year 2000 (pp. 181-182): "To the mind of the architect what dreams of possibilities present themselves? The Gothic revival, the various adaptations of Greek and Roman architecture associated with the nineteenth century, invested with the romance which attaches to everything not of our own times; and perhaps a school of young antiquarian architects, rising into prominence, who sketch and measure our abuses of the works of our fathers, and even go so far as to incorporate them into their own works. . . . Some of these ardent young men, for aught we know, may even be infatuated enough in their worship of the nineteenth century to use stone and brick for their thick walls, and indulge in other vagaries, as we do now. But the generality of architects will possibly—not to say probably—be working in a new style, which has been slowly germinating, and which fulfils all the requirements of real architecture—a vernacular style—one that has enlisted all the science as well as all the art of the day; which has pressed into its service every material capable of sustaining weight, and then of offering a stubborn resistance to the destructive agencies of nature; and then of moulding these into artistic forms born of them, and, by the help of imperishable colour, giving to the world of that day an architecture that shall rival that of mediæval cities in splendour."

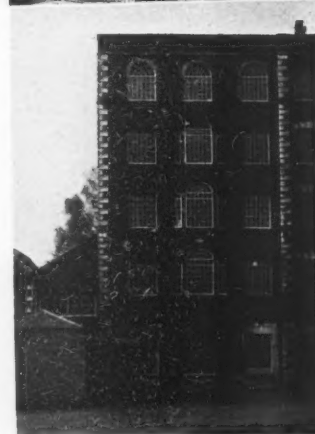




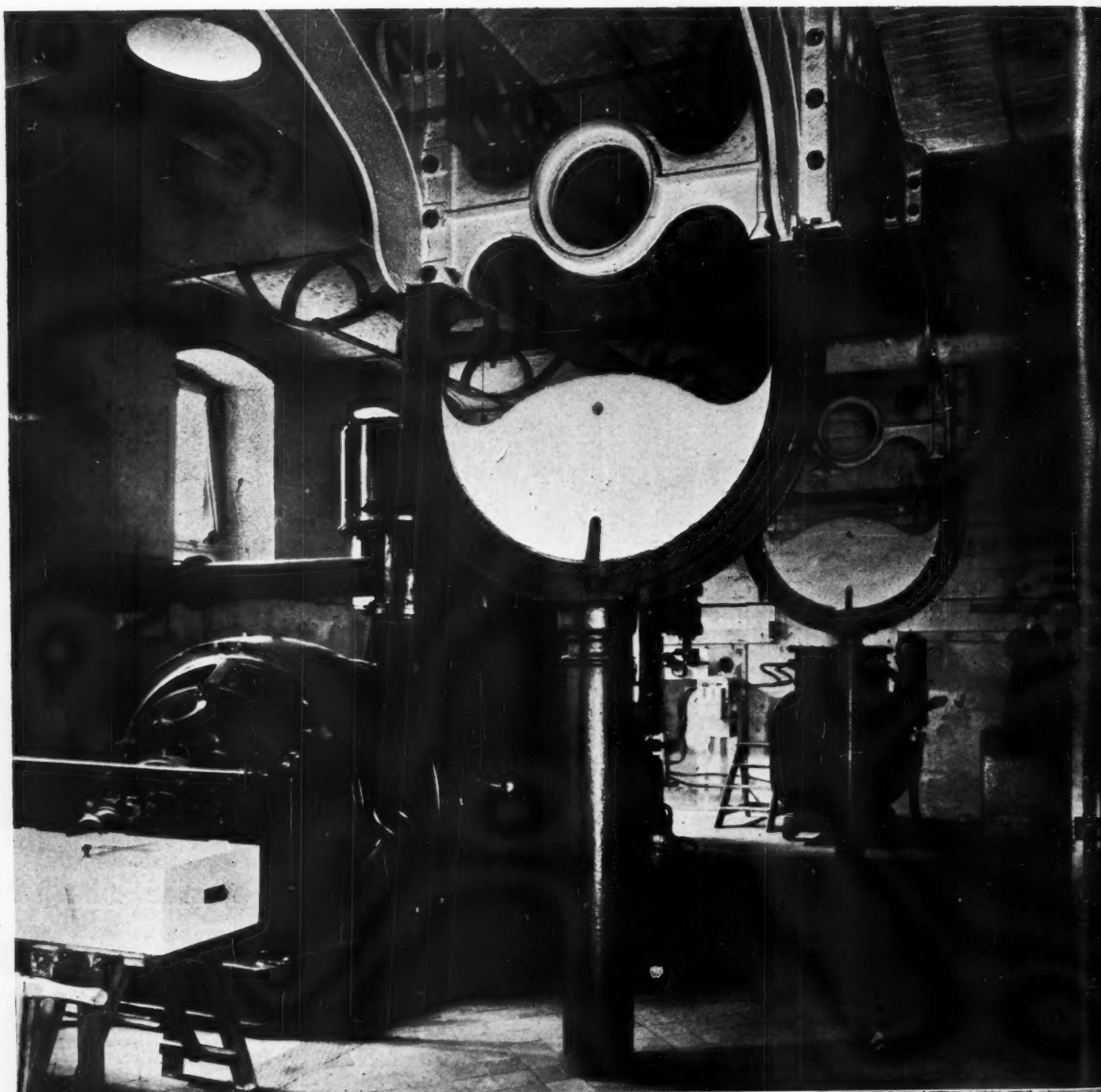
STROUD VALLEY DORIC

1813—two years after the Luddites and two years before Waterloo—Stanley Mill was built in the Stroud Valley, a couple of miles or so below Stroud. What manufacturer commissioned it, what industry it was originally built for, we do not know. Its present owner, Mr. H. Winterbotham of Woodchester House, informed *THE ARCHITECTURAL REVIEW* of two traditions current in the district. According to one the mill was a store building of the East India Company; according to the other, and much more likely, it was a cloth manufactory. The Cotswold cloth trade had flourished in the fifteenth and sixteenth centuries, declined between the middle of the seventeenth and the middle of the eighteenth centuries, but been revived, when the new machines made more rational production possible. The water of the river Frome had chemical qualities particularly favourable to dyeing. So Stroud Valley red cloth became famous. Napping mills, that is factories producing pile fabrics, were another speciality. These factories are austere piles, externally still of Georgian dignity, internally of the metallic grace which engineers of that period so often succeeded in achieving. With their Doric columns and the iron filigree of circles and pointed arches they appear both sturdy and diaphanous.





STROUD VALLEY DORIC



In eighteenth century
gentleman's pi
ediment and
country house
son of the
century Amst

The same a
engineers and
ire and Som
Hill; below,
y courtesy o
cheme), of
Halmesbury.
with their wh
n the three e
pecially hap
proportions.

BOOKS

Rural Britain and the future

INDUSTRY AND RURAL LIFE. Being a Report of the Cambridge Conference, 1942. By H. Bryant Newbold. London: Faber & Faber. 8s. 6d.

THE expansion of urban industries during the last half century has led to a continuous growth in the size and population of our great cities, a growth which has left at the centre slums, congestion, ill-adapted factories and often obsolete municipal buildings, whilst an ever expanding wave of small suburban houses spread over the adjoining countryside. These dormitory areas had no corporate life and served only as depôts from which the city's workers came like ants each morning to return again at night. The suburban dweller rapidly lost touch with city life and his house became an isolated cell without specific function in the body of the city. The symptoms of this disease have been long recognized; we have talked about them; we have suggested remedies, but we have been appalled at the cost, and have hesitated to act. Now that the German bombers have destroyed so much that we must start to rebuild our towns and cities, we realize that we have to pay the piper so we might as well call the tune; and there is considerable agreement as to what the tune should be.

It is generally accepted that the size of the so-called conurbations must be limited, that the centres of our cities must be rebuilt to let in light and air, to allow elbow room to those who use their streets and to re-create as far as possible the corporate spirit which has been lost. The spill-over from these large centres of population must therefore find a new home away from the city in the countryside. Although this will create little more demand on agricultural land than the uncoordinated growth round the peripheries of existing cities, it does create a new problem since the sites of the new towns must be determined and, in doing so, we must harm as little as possible agricultural and rural life.

The account of the Conference of the Town and Country Planning Associations at Cambridge gives in a series of statements—many by well-known authorities—the different approaches to this many-sided problem. It is impossible in a short review to consider each statement, but two major questions, the position of agriculture in our future national economy and the influence of transferred urban population on rural life, which are discussed in all the contributions—each in its own context—make the book specially valuable to those who study the future of national planning.

In considering the re-distribution of urban population, it is essential to know whether the present high level of mixed farming is to continue after the war. It is on this issue, so apparently vital to the planning of the land, that there is the greatest divergence of opinion. One group of thinkers maintain that we must, for our national safety, our economic stability and the general good of our people keep a flourishing and healthy agriculture. They see this as possible if farming is rationalized and made fully efficient, but it is doubtful whether the farmers will accept willingly the great changes which will be necessary for the attainment of this standard of production. An equally powerful group, containing many economists, holds the view that only by developing export trade can the standard of living of the nation be kept at its present level, and that any attempt to retain a high production from mixed farming must force up food prices and so handicap by high wages the country's export trade. This group assumes on the one hand that the necessary export trade will be available, and on the other that apart from a small-scale agriculture producing perishable goods—supported if necessary by subsidy—the land can be used as a playground. Their opponents admit neither assumption, rejecting the first on the basis of the change in manufacturing capacity abroad, and the second on the grounds that the beauty of the British countryside depends largely on its proper cultivation.

A third group, basing its appeal largely on a

sentimental approach, asks for the retention of farming as it existed before the war, admittedly inefficient and requiring heavy subsidies, but traditional and, therefore, worthy of preservation. In short, they wish to turn agriculture and the land into a museum piece carefully protected at the expense of the urban communities. Although this at first may seem an unreal approach, it is the logical outcome of the adoption of the policy advocated by the second group if their opponents' contention is right that the land to be beautiful and a proper place for the recreation and enjoyment of the townsman must be cultivated.

At first it may appear impossible to plan for this dispersal of population over a countryside whose future is so much in doubt, but no argument amongst agriculturalists and economists as to the future of farming need prevent the establishment of the machinery whereby the planning of the land may be made effective; nor is the immediate siting of new centres of population impossible, since whilst there remains the least possibility that the nation will need thriving agriculture, every inch of our inadequate land resources suitable for agriculture must be preserved. If later the land is found to be unwanted, no greater damage will have been done than the partial limitation, during a period of discussion, of the freedom of choice for residential and industrial areas. It must never be forgotten that most of the needs of urban industry can be met by the works of men, whilst those of agriculture are the natural basic characteristics of soil and climate.

The effect of the transfer of townsmen into rural areas requires very careful study. So far the movement has been uncontrolled and the influence on the whole bad. A village has a corporate life with its own traditional background, the transported townsmen are a series of discrete and unrelated family units, and their unconsidered introduction in large numbers into a village, either as part of a new local industry or as a new dormitory area for a neighbouring town, destroys the village life without re-creating anything in its place. Curiously, the sociological difficulties involved in the dispersal of industry and population throughout the countryside are too often overlooked, both by those who wish to enrich economically the rural areas, and by the industrialists and speculative builders, who see cheap sites and low overhead costs. This neglect of the human factor may lead to the wreckage of the best laid plans by the complete destruction of all that the one group hopes to preserve and by creating antagonisms which more than offset the advantages the other seeks to attain.

In considering the future physical plan for the distribution of industry, it is essential that a prominent place must be given to the consideration of the social needs of the common man, whether he be the farm worker or the urban factory hand. We must preserve that which is good in the corporate life of town and village alike, re-awake the dormant communal spirit which the rapid amorphous growth of our towns in the last fifty years has suppressed, and build on these a new civilization fitted to the more rapid pace of modern life. We cannot afford to neglect either the lessons of our historic past or of the new world that is opened to us by scientific discovery. To do the one would be to ignore fundamental and unchanging human values, and to do the other would be to forget that man may be adapted to many varied environments, if they do not demand adjustments beyond his power.

W. K. SLATER

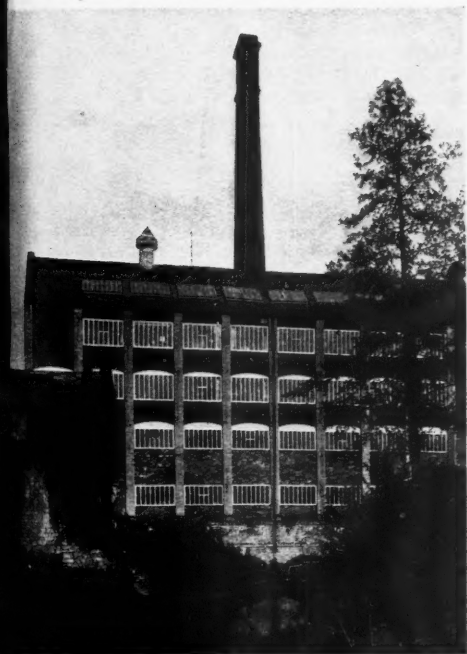
Petersburg and her Empresses

PALMYRA OF THE NORTH. The first days of St. Petersburg. By Christopher Marsden. With a Preface by Sacheverell Sitwell. Faber & Faber. 16s.

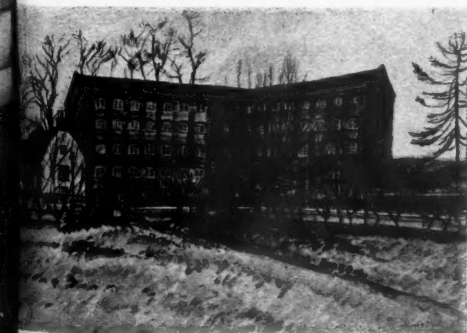
SOME time ago it was reported that the Palace of Tsarskoe Selo had been destroyed by shell-fire. Luckily this report has not been confirmed. But, though the buildings may still stand, they have been systematically looted by German troops. Thus the palace begins a new chapter of its already strange existence. Like neighbouring Leningrad, it was called into being by a despotic



An eighteenth century factory in the Stroud Valley: Bentley's piano factory at Woodchester—with its pediment and turret still in the tradition of the Georgian country house, though with the proportions and fenestration of the warehouse, as introduced in seventeenth century Amsterdam and London.



The same architectural formulae were used by the engineers and builders of factories in South Gloucestershire and Somerset. Above, another detail from Stanley Mill; below, a water-colour by Luisa Fuller (illustrated by courtesy of the Pilgrim Trust Recording Britain Scheme), of one of Francis Hill's two factories at Almsbury. Its date is 1790. The horizontal windows with their white relieving arches are nearly identical in the three examples on this page. They strike us as specially happy and up to date in the Stanley Mill proportions.



caprice and represents the fusion of native Russian exuberance and foreign virtuosity. Mr. Marsden's book (rather unnecessarily and inexplicably entitled *Palmyra of the North*) deals with the whole fantastic story of St. Petersburg's rise, at the cost of untold human suffering, from the pestilential marshes of the Neva delta, and its subsequent embellishment by the Empress Elizabeth Petrovna, daughter of Peter the Great by his peasant consort, Martha Skovronskaia. Less intelligent and less industrious than the Empress Catherine, by whose legend her reputation hitherto has been largely overshadowed, she was a far gentler and more sympathetic personage than her predecessor, the stern-faced, swarthy Empress Anna Ivanovna, the daughter of Peter's imbecile elder brother. She was a tyrant, but a genial tyrant. From her gigantic father she inherited not only his stature but his intense physical vitality. She was also—at least for a reigning sovereign—extremely handsome and, since she looked her handsomest in masculine fancy dress, instituted a series of court balls at which foreign ambassadors, young and old, were obliged to appear in breeches (which seldom suited them so well as they suited the Empress) while their husbands rolled uneasily around the floor in plumes and panniers. Mr. Marsden's book contains many engaging reflections of this extraordinary woman's temperament. Naturally the daughter of Peter the Great was a law unto herself; and we learn, for example, that she was accustomed to retire to bed, after supper at two or three o'clock in the morning, accompanied by half a dozen of her favourite ladies who, if their mistress were not inclined to slumber, sat talking in low voices and tickling the soles of her feet. On the floor at the end of her couch lay, rolled up in a quilt, "a mysterious person called Basil Ivanovich Shulkov, a former stoker of the palace stoves, who had been raised to the rank of chamberlain." At dawn the ticklers quietly withdrew, making way for the Empress's current lover. Shulkov, however, remained at his post; and at midday when she rose, if he were still asleep, Elizabeth would wake him by tugging his pillows from beneath his head or tickling him under the arms; at which he would caress the imperial shoulder and call her affectionately his "dear white swan. . . ."

Such was the sensuous and splendour-loving sovereign who helped to embellish and civilize the originally somewhat spartan and cheerless capital which her father had founded in a region of marsh and mist and fever. Mr. Marsden supplies some fascinating sidelights on the contrasts and oddities of eighteenth century Russian life—the magnificence of its fêtes and the savagery and squalor that lay beyond them. Informative chapters are devoted to the succession of gifted Italian architects—particularly Count Bartolommeo Francesco Rastrelli—who, during the first half of the eighteenth century, evolved the pleasing, if at times slightly ponderous, extravagances of the Russian baroque style. *Palmyra of the North* is agreeable, but not always very gracefully, written. The production and illustration of the book maintain, in spite of present-day restrictions, an uncommonly high standard.

PETER QUENNELL

The Scott Report for children

VILLAGE AND TOWN. A Puffin Picture Book. By S. R. Badmin. Penguin Books. 9d.

There are two parties to any planning, the planner and the "plannee," he who decides what use should be made of an area and what its general appearance should be, and he who has to live or work in it. If the first class does not understand the mentality of the second, no lasting good can come of planning. But if the second does not like the world which the first aims at realizing, planning will not be more successful either.

So one of the most important tasks for all post-war reconstruction workers, and one of the few that can be tackled and carried a considerable distance now, is educational. Education is needed to make misguided people and people with their senses blunted accept and ask for the world visualized in the Barlow, Scott, Uthwatt and Beveridge reports,

education in word and deed, on a larger scale, and of a more human kind than most of what had been done between the two wars. In deed—by good, serviceable and appealing public buildings: county halls, town halls, schools, hostels and the like, and perhaps also by good State-promoted domestic equipment. And in word—by lectures, exhibitions with their comments and captions, and by books. Of lectures there has lately (thanks chiefly to CEMA, ABCA, the DIA, etc.) been quite a fair amount, of exhibitions gratifyingly much, *Living in Cities*, *Living in Houses*, *The Englishman builds* and similar object lessons are bound to influence those who see them. An even wider influence can be anticipated from three recent books, all three inexpensive and eminently suited to the needs of the man in the street. *Living in Cities*, by Ralph Tubbs, the shilling Penguin is one, *Your Inheritance*, the Architectural Press's shilling pamphlet the second, and now this excellent new Puffin Book comes as number three.

Here the author has gone even more radically to the roots of our planning obstacles. It is not the man in the street with his tastes and dislikes hardened by prejudices, but his children who are here addressed. *Village and Town* is exemplary propaganda. Mr. Badmin's lithographs, done direct to the plate, are crisp and sensitive—an admirable achievement in a book at so low a price. The story is well told, brief, elementary, and never boring.

The first of the thirty-two pages shows the earliest huts of boughs and stone, the second the Norman castle. The Plantagenet manor house follows, with its hall and the construction of the hall roof. The constructional drawing is unfortunately far from correct. So are the few others in later pages. That is a serious deficiency, very disappointing in such a primer book, but the only deficiency I have noticed. Village church and cathedral are charmingly portrayed. The abbey on the other hand is, strange to say, missing.

The development of arch and window is indicated in seven simplified drawings. Now we reach the centre of the book, a map showing the distribution of brick, ancient rock, sandstone, limestone, elms and oaks, reeds, plaster and so on over the British Isles, and surrounding this spread on the preceding and following pages delightful pictures of the village scene of a timber, plaster and thatch village, a brick and tile village, a limestone village, a hard stone village, the sixteenth century town and—formal as against Tudor picturesqueness—the eighteenth century town.

The two next pages deal with the chaos of the nineteenth century and the coming of the garden city, and then the situation to-day is reached, with concrete as a new material, rather overstressed in its importance, and a few well-worded and easily grasped statements on the future. They are bold in their implications, but will appear almost a matter of course to any child that has followed the book.

STANISLAS T. SCOTT

SHORTER NOTICES

BROADSHEETS 1-10, issued by the Association for Planning and Regional Reconstruction.

Research for post-war reconstruction goes on in many places, from the Ministry of Works and Planning—or should we say the Ministry of Works, and the Planning Department which will one day be part of the Ministry of Planning, to the private office, the private research team such as the West Midland Group in Birmingham, and private business enterprises such as the Kitchen Planning Centre. One of the most active, serious and consistent research groups is the Association for Planning and Regional Reconstruction. Of its work not much has so far been published. There is up to the present moment only a series of ten broadsheets, sent out free to those interested.

No. 2, first printed in 1940, and now issued in its fourth edition, gives general information about the Association. Lord Forrester is its chairman, George Goyder, E. A. A. Rowse, C. Sjostrom, Professor Eva Taylor, F. R. Yerbury are the Board, G. P. Catchpole is secretary, Miss Tyrwhitt

the director of research.

The Association works on the premises of the School of Planning and Research for National Development and carries on the work of the school which has ceased to operate independently.

The other broadsheets deal with such matters as the delimitation of regions for planning purposes (No. 1) according to such principles as geographical characteristics, metropolitan influences, the influences of calls on regions and single function areas; regional boundaries of England and Wales (No. 9) as suggested by J. Dower, Eva Taylor, E. A. A. Rowse, E. W. Gilbert and C. B. Fawcett; production and consumption statistics and distribution principles of fresh food in Britain (Nos. 4, 5 and 6); comments on waste collecting and waste disposal (Nos. 7 and 8), comments on the world energy situation (No. 10) with special reference to British coal; and an analysis of housing needs in 1950 (No. 3) in relation to size of families and number of children under fourteen.

The broadsheets are very well produced and illustrated by effective coloured graphs and diagrams.

THE SCHOOL BASE. By J. Howard Whitehouse. Oxford University Press. 1s.

For well over thirty years Mr. Whitehouse, Warden of Bembridge School and Curator of the Ruskin Museum, has advocated a scholastic reform which, now that so many schools will have to be rebuilt and so many slum areas replanned, has become eminently topical. His suggestion is to establish outside our towns, school settlements in which the elementary and secondary schools of the whole town, or, in the case of larger cities, of a borough or district, would be gathered together in a generously laid-out group with joint games facilities, gymnasias, catering, workshops, exhibition galleries, hall and stage, chapel, etc. Daily transport forward and backward could easily be arranged. Mr. Whitehouse has interesting things to say about that. He also deals with the implications of such a school-life in the open on the use of leisure, on nutrition, on the development during adolescence, etc. There can be no doubt about the advantages of such settlements to health and social life. The scheme combines public school and day school attractions and would be feasible, if backed by the Board of Education. It seems revolutionary, but is in fact not more so than Linton and Impington. Finance may appear frightening, but Mr. Whitehouse points out the cheapness of land in the country as against costly new sites with the necessary better accommodation for play and games which would have to be purchased in the cities.

SHOP PLANNING AND DESIGN. By A. P. Hartnell. Bloomsbury Publishing Company. 21s.

This book, written by the Managing Director of a well-known firm of shop planners and shop fitters, is frankly addressed to those who, after the war, will be in need of new premises or renovations. That of course implies an attitude different from that taken in Bryan and Norman Westwood's *Smaller Retail Shops* and Mario Labo's *Architettura e Arredamento del Negozio*. The examples of work which Mr. Hartnell has chosen are only in a few cases of an adventurously modern kind. On the other hand it is well worth noting—as a sign of the times—that period schemes are completely absent from his book, and schemes of the jazzy variety of the contemporary style rare. The majority of the designs illustrated are interesting as solutions to the problems facing the architect or shop planner in working out suitable frontages, shop windows and interiors of shops and stores for particular types of merchandise. The diagrams of fitments in plan arranged to go with stanchions of different spans, and of unit fitments in elevation and plan will be useful to architect as well as shop owner or shop manager. Complete sets of units are shown—5 ft. 2½ in. high units, 6 ft. 6 in. high units, unit counters, and unit hanging cases, all of the disappearing flat and tray, the glass-fronted drawer, and the open locker types. It is evident that a great amount of practical experience has gone into these pages.

ANTHOLOGY

A most glorious triumph of British genius

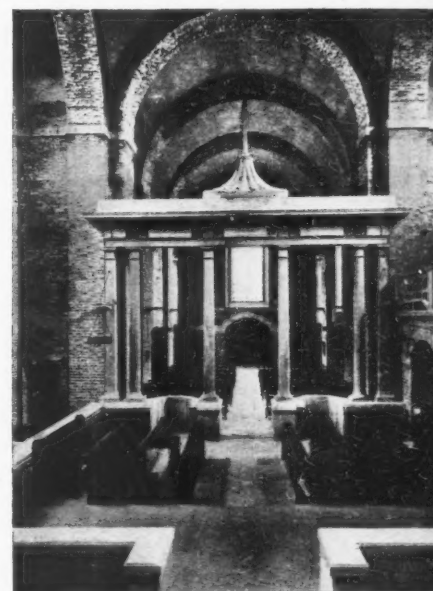


I took a very early opportunity to visit Sunderland. When I gained some heights in the vicinity of that place, the ocean burst on the view, wrapped in all the terrors of the storm. Being from my infancy accustomed to the glorious and awful scenes of the sea, I hailed with peculiar sympathy this inexhaustible source of wonder and contemplation, and on the wings of fancy darted across the raging deep to those delightful shores, where, in solitary walks, I first meditated on the immensity and beauty of Nature's works.

It was a scene, which could not fail to suggest some reflections on that Divine Power, whose omnipotent voice has fixed the limits of the ocean. In this frame of mind I approached the iron bridge at Sunderland. I gazed, enraptured, on the amazing influence of art, even when employed only on inanimate subjects of nature, and was on the point of offering a tribute to the sublimity and the stupendous powers of the human mind, which so peculiarly characterize the design and execution of the bridge, but I desisted, on perceiving in the middle part of the railing, on both sides, the truly appropriate inscription, "Nil desperandum, auspice deo." The transports of wonder and admiration now subsided into tranquil reflections on the sovereignty of our nature, under the benign supremacy of Providence. The Wear was on both sides of the bridge crowded with vessels, one of which, with her top-gallant masts up, prepared to pass under the arch down the river. The immense yet elegant masses of stone work, which, on both banks of the river, support the bridge, had, I understood, been twice repaired since the erection of the bridge, which, as is well known, forms a single arch of cast iron; it combined great beauty with lightness. I walked for a considerable time, to and fro, on the lofty shores, which rise horizontal with the arch; over this is a fine gravel carriage-road, with commodious pavements. The bridge is provided with an adequate number of lamps. I then descended to view the bridge from the level bank of the river. This situation enabled me to survey at once the piers and bridge; I looked up with increase of wonder and delight, the arch being upwards of one hundred feet from the surface of the river. I paused a long time, and then departed with such sensations as this most glorious triumph of British genius naturally excited.

J. A. ANDERSEN (*A Dane's Excursions in Britain*, 1809)

the key-men on planning. Even wider has Professor Reilly's influence been with the general architecture-minded public. To him, to a large extent, the credit must go for having made people aware of the implications of up-to-date town-planning. He is an indefatigable writer, frank, buoyant, and full of sense. His comments on topical matters have for years appeared in the professional press as well as daily papers. For some years he was Consulting Editor of *The Architects' Journal*. His many contributions to *THE ARCHITECTURAL REVIEW*, especially those on London streets and on the first third of the twentieth century will be distinctly remembered by most readers. He never hesitates to take sides, but he does it gracefully and without venom. His own taste? Catholic and generous, though highly sensitive to any lack of integrity. His own style? To define that is much harder. When, some thirty years ago, he practised more consistently than he did later, his preference was a crisply simplified Adam or Neo-Classical. The church of St. Barnabas, Shackleton, Dalston, is perhaps his most successful single building, strikingly progressive for its date in the bold bareness of the brick walls, yet truly ecclesiastical—a tenth swallow to add to the nine of Mr. Pevsner's article on the *Nine Swallows* of 1900-1914, which *THE ARCHITECTURAL REVIEW* published last year. The Georgian screen is delicate and decidedly original. Professor Reilly's sympathy with the Neo-Classical idiom accounts for his close relations with some of the leading American architects, such as MacKim, Mead and White, and Carrère and Hastings. On Devonshire House, Piccadilly, he co-operated with Thomas Hastings. The following are his most important



C. H. Reilly: St. Barnabas, Dalston, London

publications, all of them highly readable: *Liverpool Streets and Buildings*, 1921, *Manchester Streets and Buildings*, 1924, *Architectural Problems of To-day*, 1924, *British Architects of the Present Day*, 1931, *Theory and Practice of Architecture*, 1932, *Scaffolding in the Sky* (his autobiography), 1938.

Sir Reginald Blomfield

The nineteenth century is the century of the architect-cum-archi-

MARGINALIA

New Members for the Fine Art Commission

It looks as though the Fine Art Commission is to be given a say in aesthetic aspects of planning after the war. Three new members have been appointed. They are Professor Holford, Mr. J. Hubert Worthington and Professor Geoffrey Webb—two architects and an architectural scholar. Professor Abercrombie, Mr. Holden, Sir Edwin Lutyens, Mr. Curtis Green and Professor Richardson were already members. That means now eight architectural members out of a total of thirteen.

The Domesday Book of 1942

The Ministry of Agriculture has completed a survey of all English and Welsh farms of five acres and more, 300,000 in all. The survey gives answers to such questions as condi-

tions of tenure, fertility, adequacy of equipment, degree of infestation with pests, water and electricity supplies, proximity to transport facilities, statistics on crop acreage and livestock numbers, exact boundaries (with plans drawn to the 6 in. or 12½ in. scale). The survey is bound to become of immense importance to post-war planners. It will help to determine what land must be reserved for agriculture, how land released for development should be outlined so as not to cut across existing farms, what new or improved cottage accommodation is needed, and what additional water and power supplies have to be provided.

Royal Gold Medal, 1943

In approving of the award of the 1943 Royal Gold Medal for Architecture to Professor C. H. Reilly, His Majesty the King has graciously

accepted the much debated tenet that the educationalist's and propagandist's work for a cause can be of the same value and worthy of the same prize as the very best practitioner's for the same cause. For sensitive and original as Professor Reilly's designs may be, especially those which he did between his appointment to the chair of architecture at Liverpool University in 1904 and the last war, his reputation and his fame rest on his unique teaching and preaching success. He took over a course of about twenty students. When he retired in 1933, there were two hundred odd. But that is a detail. The important point is that his course was not merely the best in England; it has in its structure and spirit and in its School of Civic Design, revolutionized other architectural schools all over the country. To-day its members are



One of the flats in the Hackney Housing Estate illustrated on pages 37-39, an illuminating example of the adaptation of modern architecture to common taste.

tectural historian. From Viollet-le-Duc it goes on to Street and his Spanish research, T. G. Jackson and many others, and then to the generation of 1855 to 1865 with Lethaby, Prior and Sir Reginald Blomfield. With Sir Reginald, whose death occurred on December 27, the last of the leaders of that generation is now gone. In the generation

following his, the outstanding architects no longer cared for historical scholarship—a proof as good as any that by then historicism had reached its natural end, and that a new, original and not imitative style was due—in fact the style which Sir Reginald, undaunted fighter to the end, scornfully called Modernismus. Hence his own architecture does not

to-day enjoy as unquestioned a reputation as, for instance, his *History of French Architecture* (in four volumes).

Yet Sir Reginald Blomfield was once in the vanguard, for a dozen years or so in his youth. He started as a true believer in the Arts and Crafts a small firm to make furniture and furnishings, Kenton & Co. That was in the eighties, and Lethaby was one of his partners. Then, in the nineties, he belonged to the very first editorial committee of the newly founded *ARCHITECTURAL REVIEW*.

Soon after 1900, however, he evolved the style to which he remained faithful ever after, a style based on the late Norman Shaw's Piccadilly Hotel, though tempered by a dose of French *Dix-huitième*. This comes out especially clearly in his Carlton Club. His best known works are the Regent Street Quadrant, the Menin Gate and Lady Margaret Hall. He took an active part in the fights for the preservation of Waterloo Bridge and Wren's City churches. He was president of the R.I.B.A. in 1912-1914, selected in 1913 to receive the Royal Gold Medal for Architecture, and knighted in 1919. His *Memoirs* appeared in 1932.

Albert Kahn

Albert Kahn who died at Detroit last December may not have invented the grid-iron type of concrete factory facade, that is the facade

with unconcealed and unmitigated stanchions and beams, but he certainly made it his stock in trade and gave it the international popularity which it achieved after the last war. Albert Kahn, a native of Rhaunen, Westphalia, who was taken to America at the age of twelve, was not a pioneer or a great creator of architectural form; but he was an overwhelmingly successful organizer, quick in the uptake, an optimist and a realist. When the Modern Movement had at last found a footing in the United States, he accepted it and, wherever he found clients who agreed to strictly modern form, made a very good job of it. He was architect to Ford's, General Motors, Packard's, Chrysler's and Republic Steel. In normal times he employed a staff of about 400. His work is said to represent 800,000,000 odd dollars.

Footnote to the Hackney Flats

There is nothing more illuminating than a visit to individual flats on modern housing estates, a few years after they have been in use. By then tenants have assimilated them, accepted what they really like and neutralized by their own belongings and their arrangement what they could not tolerate. The balconies and curtains of the Kensal flats have in that way acquired a fame quite their own. Our staff photographer, when taking the pictures of the Hackney

[continued on page xxxviii]

JMB
BRAND

LIQUID IMPREGNATER and POLISHER

FOR ARTIFICIAL STONE, MARBLE, TERRAZZO, ETC.

Easiest to apply, it produces a brilliant permanent high gloss and renders the stone absolutely waterproof.

Full particulars on application to the manufacturer:—

JAMES M. BROWN

35, Surrey Street, Strand, London, W.C.2

Works:—Stoke-on-Trent, Staffs



The Market Cross, Wymondham, Circa, 1616.

THERE is a great deal of wisdom in the old saying that a building should have a good hat, and good boots—but it does not go far enough. Many buildings with sound roofs and good damp-proof courses would be drier if their walls also were protected by renderings of waterproofed cement mortar, applied to their outer faces as stucco, or to the inner surfaces of the walls in place of the usual undercoats of the ordinary plastering. The benefits of the latter method are greater than at first seem apparent; they are fully described in the leaflet "Weatherproof Walls," a copy of which will be yours for the asking.

'PUDLO'

BRAND

CEMENT WATERPROOFER

It is tantalising, but inevitable, that so many of the interesting jobs in which 'PUDLO' Brand waterproofer is now being used must remain "unheralded and unsung" until after the war. In place of the illustrations that cannot be used, we are pleased to publish a series of drawings of East Anglian monuments; these drawings, in pen and wash, are the work of Leonard Squirrell, A.R.W.S., R.E., who, by the verdict of his fellow artists, is placed in the ranks of the foremost British landscape draughtsmen.

KERNER-GREENWOOD & COMPANY, LIMITED
MARKET SQUARE, KING'S LYNN

Sole Proprietors and Manufacturers

Ad. P. 52



Cliveden, Bucks, built for the Duke of Sutherland in 1850-51 by Sir Charles Barry, and now, by its present owner, Lord Astor, given to the National Trust.

continued from page xxxvii]

Flats shown on pages 37 to 39 has made a special point of penetrating (by kind permission of the Borough Housing Authorities) into a number of flats and placing on record their present appearance. We can illustrate overleaf only one example. The plain tablecloth, the large-leaved plant, and the finely trellised bird-cages go surprisingly well with the style of the building. No additional embellishment was felt to be needed. But the fireplace is the visual centre of the room. Here this particular

tenant—and was she really wrong?—wanted something more decorative and sprightly than the simple smooth tiles. So the scalloped mirror was hung up, and the two wildly gesticulating bronze figures placed in position. The lace curtains again, many will admit, fill a legitimate decorative purpose. Their design may be uninspired, but they make a wide bare opening look cosy and domestic. Only the carpet jars, because it wants to be fanciful, but succeeds only in being loud.

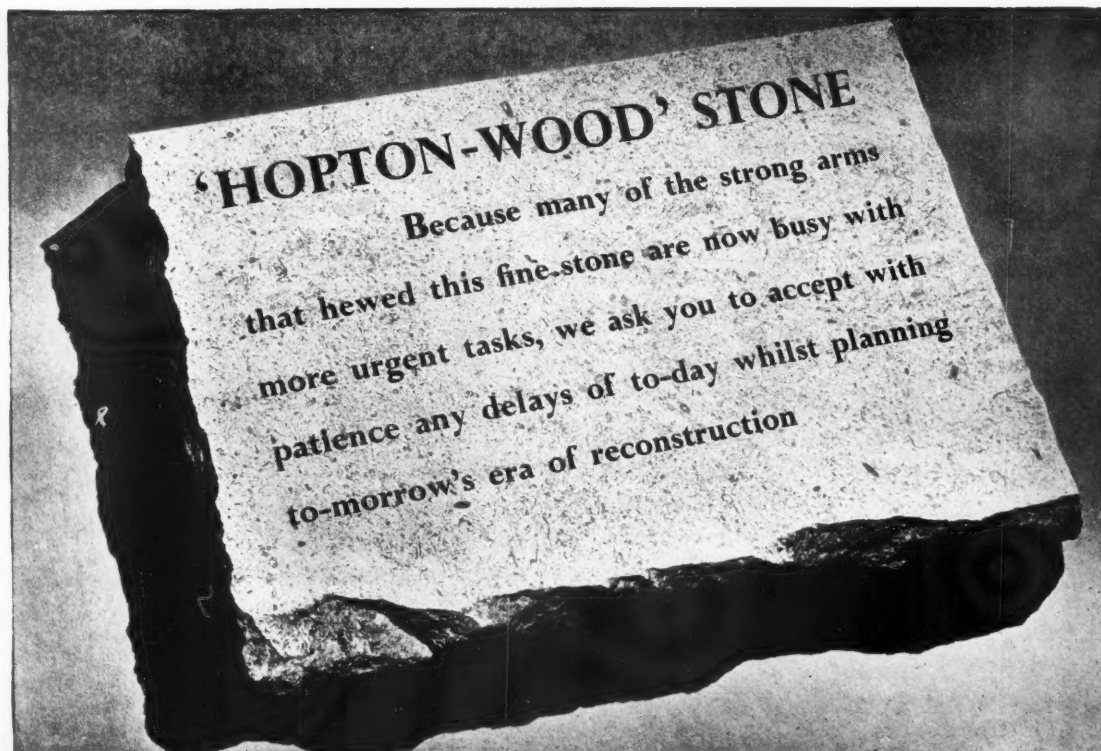
Cliveden for the Nation

Cliveden, Bucks (or Cliefden as its name appears in older records) was built, according to the inscription on the cornice "consilio ingenio-que Caroli Barri." Sir Charles Barry designed the house for the Duke of Sutherland in 1850 in his grandest Italian manner. With its order of giant pilasters it is much less restrained than Barry's earlier clubs. But that was the general development of European architecture about 1850. The house has now been given by its present owner, Lord Astor, to the National Trust, complete with its furnishings (hall, staircase and library incidentally were designed by Pearson), with the 400 foot long terrace, its balustrade bought in 1898 from the Villa Borghese in Rome, with its splendid grounds, Cliveden Woods, and the famous stretch along the River known as Cliveden Reach. The chief condition of the gift is that Lord Astor and his family will be left in possession as long as they wish to remain, and that, should they choose to leave, the house will be used for promoting friendship between the peoples of Great Britain, the United States, Canada, and the other Dominions.

Stepney after the War

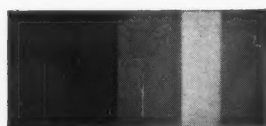
The work of the Stepney Reconstruction Survey Group was described

in a recent lecture at the Housing Centre by Miss P. Darton. The group was formed about a year ago. All its members work in Stepney, know Stepney's problems and are in sympathy with them. Housing conditions in the borough were exceedingly unsatisfactory before the war. 6,100 families lived in overcrowded quarters, 5,700 families in unfit underground rooms. About sixty per cent. of Stepney's houses, the Group judges, should be demolished. The whole borough is in need of re-planning. So schedules of specified needs were worked out, divided into six classes of people: young single or married people living alone, young couples without children, families with children, families with grown-up children at home, older couples living without children, aged persons living singly. According to these classes neighbourhood units have been worked out, varying from 500 to 2,000 people. Each unit needs a morning day nursery, under the management of the mothers, a club for young people managed by the boys and girls themselves, an institute with library, snack bar and dancing space, playgrounds for children, public laundry facilities and block or unit heating. It is to be hoped that the Stepney Group will be able to publish some of its work so as to make it available to other boroughs or towns.

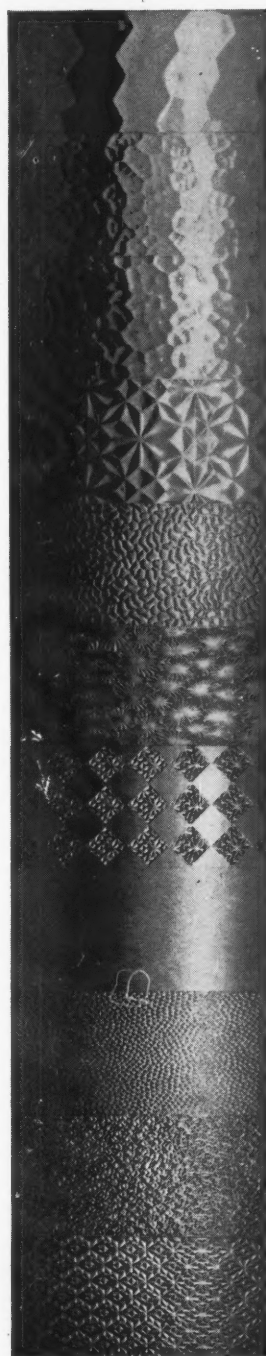


THE HOPTON-WOOD STONE FIRMS LTD., WIRKSWORTH, DERBYSHIRE
and at Victoria House, Bloomsbury Square, London, W.C.1

Members of British Stone Federation



The apparatus used to demonstrate the properties of these Glasses consists of a white opal tube lamp 4½" behind Clear Glass, and a ½" wood strip, painted black on a white background. Each type of glass in turn is placed in front of this, so that its properties may be illustrated.



—MAJESTIC

—ARCTIC (SMALL)

—ARCTIC

—KALEIDOSCOPE (LARGE)

—RIPPLED

—MURANESE

—AMAZON

—PINHEAD MOROCCO

—SMALL MOROCCO

—LARGE MOROCCO

—KALEIDOSCOPE

FACTS ABOUT GLASS FOR ARCHITECTURAL STUDENTS

USES—No. 6 Figured Rolled Glass

USES

Figured Rolled Glasses are used for internal partitions, windows of rooms where partial or total privacy is desired, and also in factory glazing where direct vision is not essential.



SPECIFICATION

The groups of glasses described here possess a varying and progressive degree of light diffusion and privacy, and the photographs demonstrating these properties indicate the most suitable type for any specific purpose.

Formal Patterns :

The pattern, deeply impressed on one surface, gives brightness to the appearance of the glass and partly obscures direct vision.

Diffusing Patterns :

The pattern, deeply impressed on one surface, gives a high degree of brightness to the appearance of the glass and almost completely obscures direct vision, with very little loss of light.

Complete Diffusion and Obscuration Patterns :

The pattern, deeply impressed on one surface, is geometrical in design. It gives a high degree of brightness to the appearance of the glass, complete diffusion, and totally obscures direct vision, with very little loss of light.

The patterns shown are approximately ¼ actual size.

This is published by Pilkington Brothers, Limited, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in architecture.

LONDON OFFICE AND SHOWROOMS AT 63 PICCADILLY, W.1 · TELEPHONE : REGENT 4281 where architectural students may get advice and information on all questions relating to the properties of glass and its use in building.

The Buildings Illustrated

Flats

Architects: Messrs. Joseph

The general contractors: Warwick Grove, Ford & Walton, Ltd.: Springfield, John Laing & Sons, Ltd. Principal sub-contractors were as follows: J. Ashton & Sons, demolition work at Warwick Grove; H. J. Moyes, demolition work at Springfield; Flooring Contracts (London) Ltd., concrete floors, roofs, staircases, and surface shelters; Air-guard Ltd., trench shelters; Plastering Ltd., non-slip aggregates and plasterwork at Warwick Grove; Pollock Brothers, non-slip aggregates and plasterwork at Springfield; Erith & Co., Ltd., brickwork (plinths); Marston Brick Co., Ltd., brickwork generally; London Brick Co., Ltd., Flettons; F. C. Flack, brickwork; Permanite Ltd., damp-proofing; F. Bradford & Co., Ltd., artificial stonework at Warwick Grove; Emerson & Norris, Ltd., artificial stonework at Springfield; Carter & Co., Ltd., terrazzo and faience; Everseal Products, Ltd., roofing; Rippers, Ltd., joinery; Martin Bachtold, special windows; Nettlefold & Sons, Ltd., door and window furniture and plastics; John Bolding & Sons, Ltd., sanitary fittings at Warwick Grove;

W. N. Froy & Sons, Ltd., sanitary fittings at Springfield; Hupex Taps, Ltd., special fittings; Kay & Co., Ltd., anti-siphonage traps; Permutit, Ltd., water-softening plant; T. W. Palmer & Co., Ltd., gates and railings, and stair balustrades; Holliday, Hall & Stimson, Ltd., electrical installation (flats); H. V. Stone, Ltd., electrical installation (club-room and laundry); Hammond & Champness Ltd., service lifts; J. Jeffreys & Co., Ltd., air conditioning (club-room and laundry) and thermostats; Ford & Walton Ltd., painting and decorating at Warwick Grove; C. & T. Painters Ltd., painting and decorating at Springfield; International Paint & Compositions Ltd., paint; Lewis Berger & Sons, Ltd., stain and varnish; H. W. Butler (Furnishings) Ltd., club-room furniture (chairs and tables); Pelham (Materials), Ltd., curtains; Gas Light & Coke Co., Ltd., cooking—gas (in flats); Hackney Borough Council, Electricity Department, cooking—electric (in flats); T. M. Gardiner Ltd., playground equipment; W. B. Simpson & Sons, Ltd., wall tiling to laundry and staircases; Avis Engineering Co., Ltd., tile fireplace surrounds, interiors, etc.; J. Gardner & Co., Ltd., flower boxes; Haskins Ltd., sub-

station steel shutters; General Constructional & Engineering Co., Ltd., steel doors; G. Brady & Co., Ltd., wood rolling shutters to dust bins; Lister Bros., drying tumblers (laundry); Marbolith Flooring Co., Ltd., floor finish in flats; Bennetts Wood Flooring Co., Ltd., floor finish in club-room; Hotpoint Electric Appliance Co., Ltd., washing machines; Heatrae Ltd., hot-water equipment to laundry, and E.L. hot-water heaters to flats; F. H. Wheeler Ltd., metal picture rails; and Grassphalte Ltd., hard tennis court at Springfield.

Municipal Offices, Friern Barnet

Architects: Sir John Brown and A. E. Henson

Clerk of Works: W. R. Haward

General Foreman: F. Sims

The general contractors were the Raglan Building Co., Ltd., who were also responsible for the excavation, foundations, plumbing, plaster and joinery. Principal sub-contractors were as follows: Bassett-Lowke Ltd., model of building; D. Dimmock & Co., Ltd., demolition; D. Anderson & Son, Ltd., dampcourses, special roofings and roofing felt; Neuchatel Asphalte Co., Ltd., asphalt; Twistell Reinforcement Ltd., reinforced concrete; R. Y. Ames, Stamford stone facing bricks; Ketton Architectural

Stone Co., Ltd., Brookes Ltd., artificial stone; Banister Walton & Co., Ltd., structural steel; Kleine Co., Ltd., fireproof construction; H. Nethercot & Co., Westmorland green slates; London Sand Blast Decorative Glass Works, Ltd., glass; Henry Hope & Sons, cast lead; Aeme Flooring Co., Ltd., woodblock flooring; Anselm Odling & Sons Ltd., patent flooring and marble; C. B. Jackson & Co., Ltd., central heating and ventilation; Bratt Colbran Ltd., grates; Whitehall Crane Ltd., boilers; Prior Mastoker fitted by Prior Burners Ltd.; E. Wight & Co., electric wiring; Hume, Atkins & Co., Ltd., electric wiring and telephones; Dent & Hellyer, sanitary fittings; Dryad Metal Works, door furniture; Crittall Manufacturing Co., Ltd., casements; Shutter Contractors Ltd., rolling shutters; Haywards Ltd., fireproof doors; F. A. Norris & Co., Ltd., iron staircases; Tidmarsh & Sons, blinds; James Walker (Architectural Decorations) Ltd., decorative plaster; Grundy (Teddington) Ltd., metalwork; Jaconello Ltd., tiling; Fredk. Sage & Co., Ltd., panelling; Gordon Russell, furniture; Beresford & Hicks, office fittings; Evertaut Ltd., cloakroom fittings; Synchronome Co., Ltd., clocks; Eric Munday, signs.

Miscellaneous

URGENTLY REQUIRED. "Architectural Review," 1940/1942, complete. Wm. Dawson & Sons Ltd., 43, Weymouth Street, W.1.



Peace & Quiet

by Nature

Also obtained by using NEWALLS acoustic materials.

NEWALLS INSULATION CO. LTD., WASHINGTON STATION CO. DURHAM.

